

Production Estimates and Crop Assessment Division

Foreign Agricultural Service, USDA

Current Eastern U.S. Crop Condition

June 26, 2002

For more information, contact Rao Achutuni
achutuni@fas.usda.gov

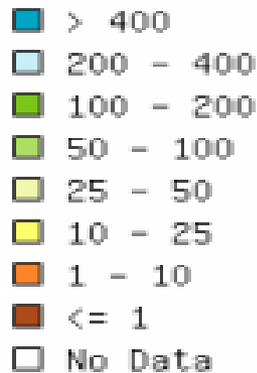
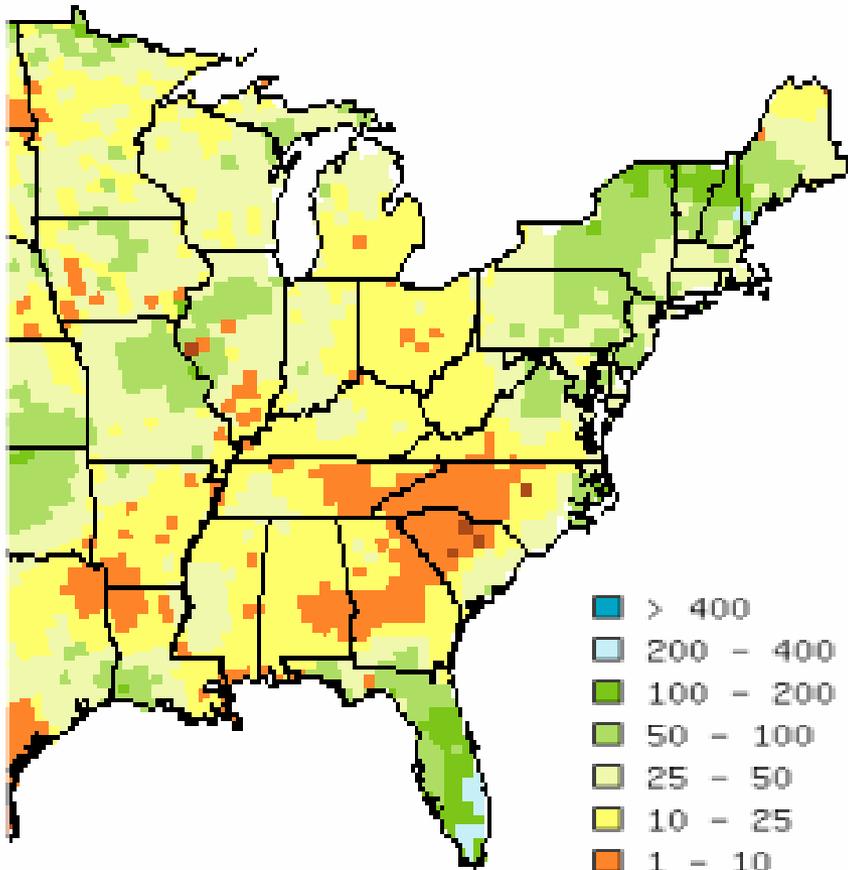
FSA-FAS Center for Remote Sensing Analysis



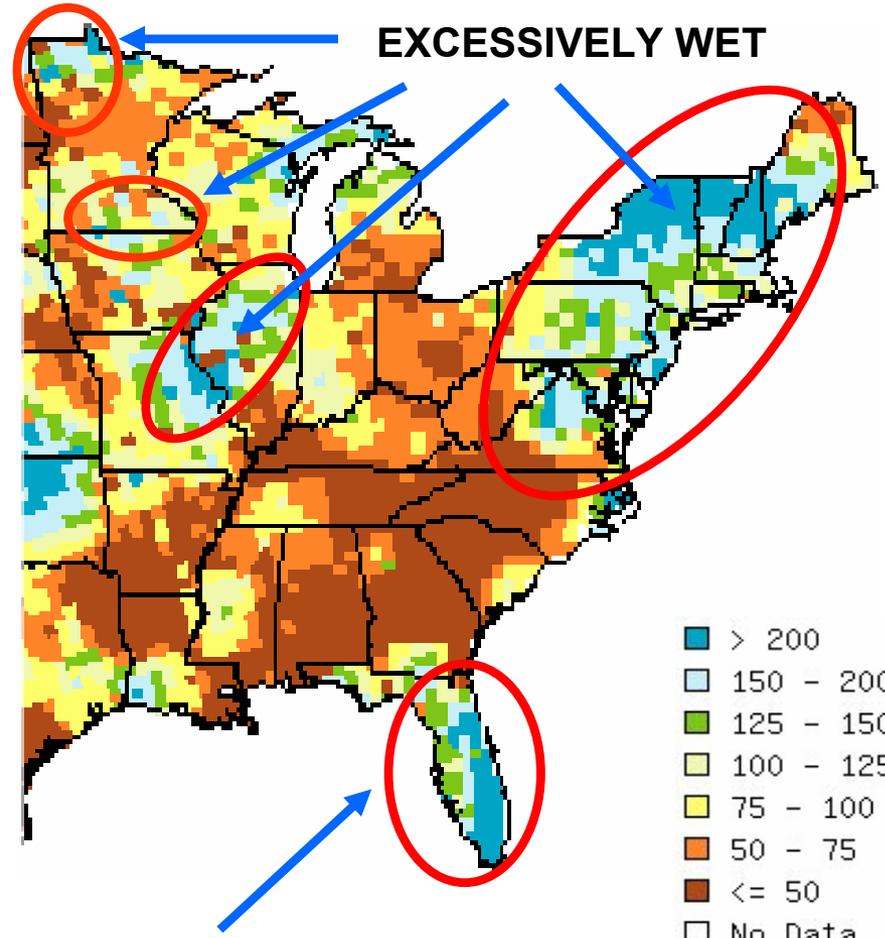
PECAD

U.S. EAST: JUNE 11 – 20 CUMULATIVE RAINFALL

CUMULATIVE (mm)

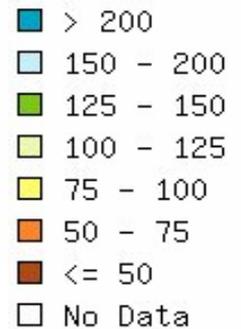


PERCENT OF NORMAL



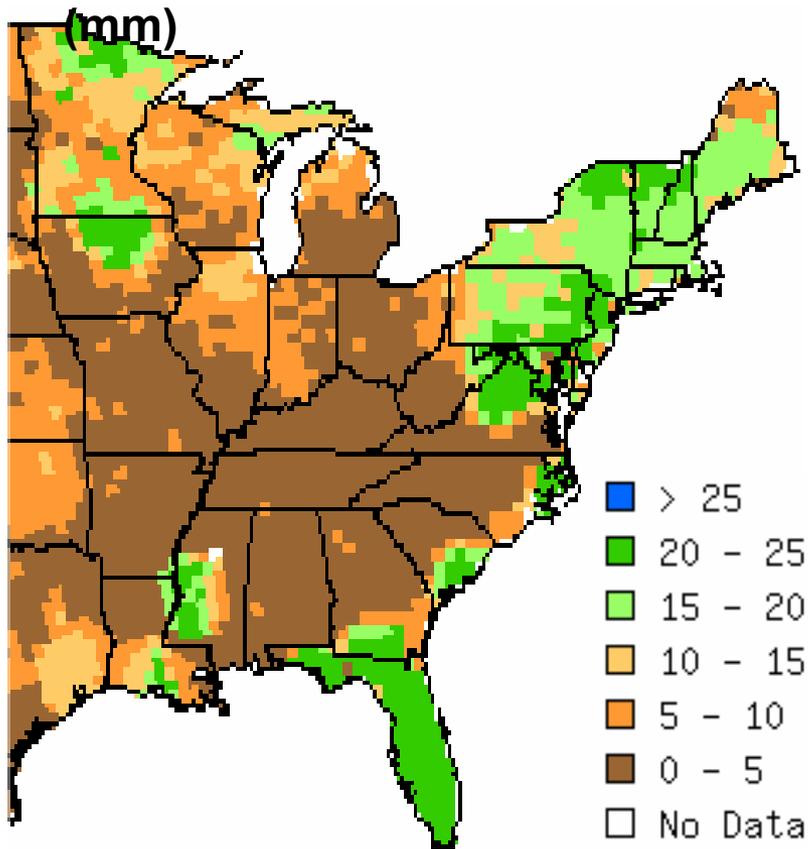
EXCESSIVELY WET

EXCESSIVELY WET

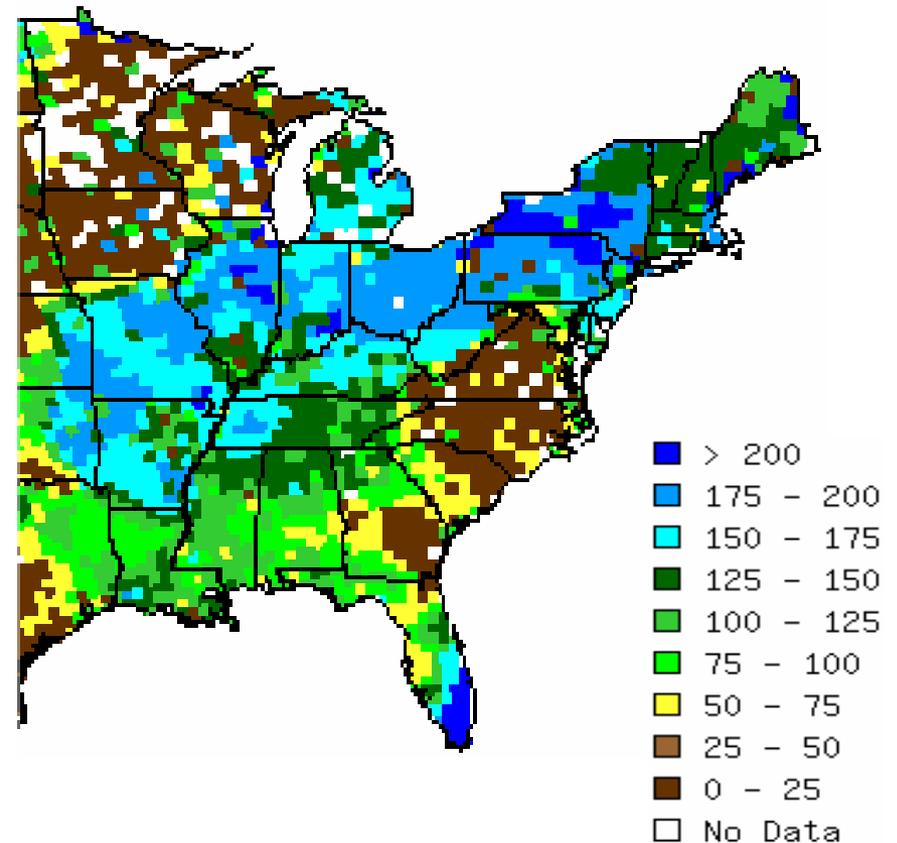


U.S. EAST SOIL MOISTURE: JUNE 11 – 20, 2002

SURFACE SOIL MOISTURE (mm)



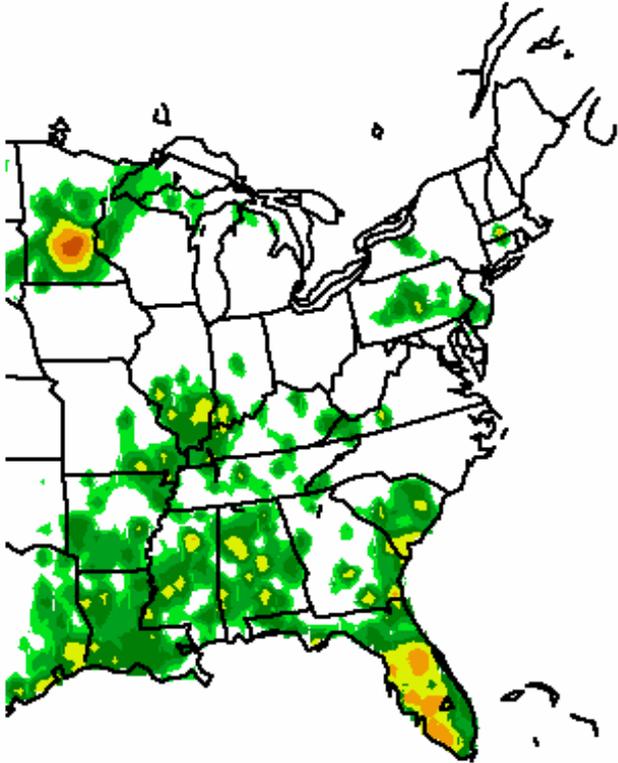
SUB-SURFACE SOIL MOISTURE



USAF GRIDDED DATA

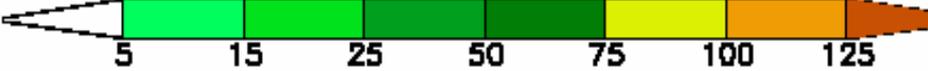
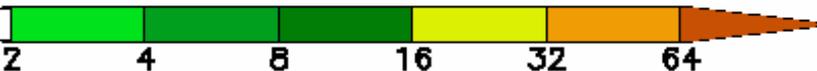
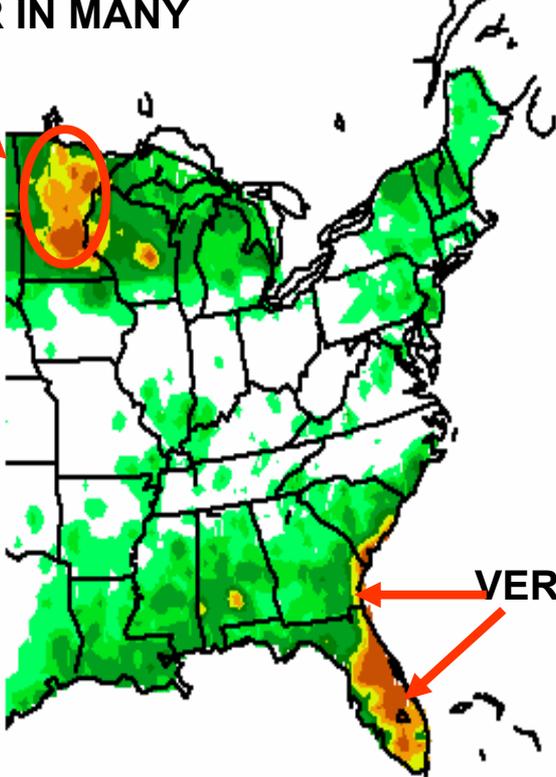
U.S. EAST: CUMULATIVE PRECIPITATION (mm) ENDING JUNE 25, 2002

DAILY



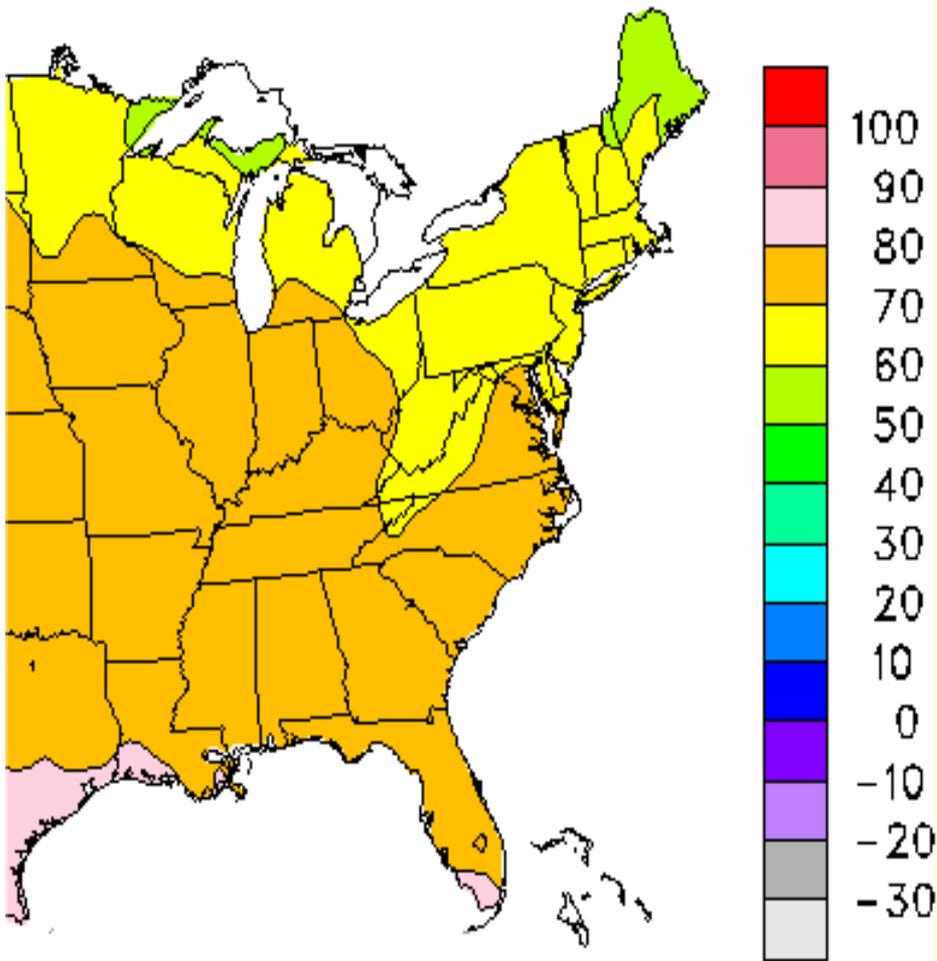
STANDING WATER IN MANY
FIELDS

7-DAY

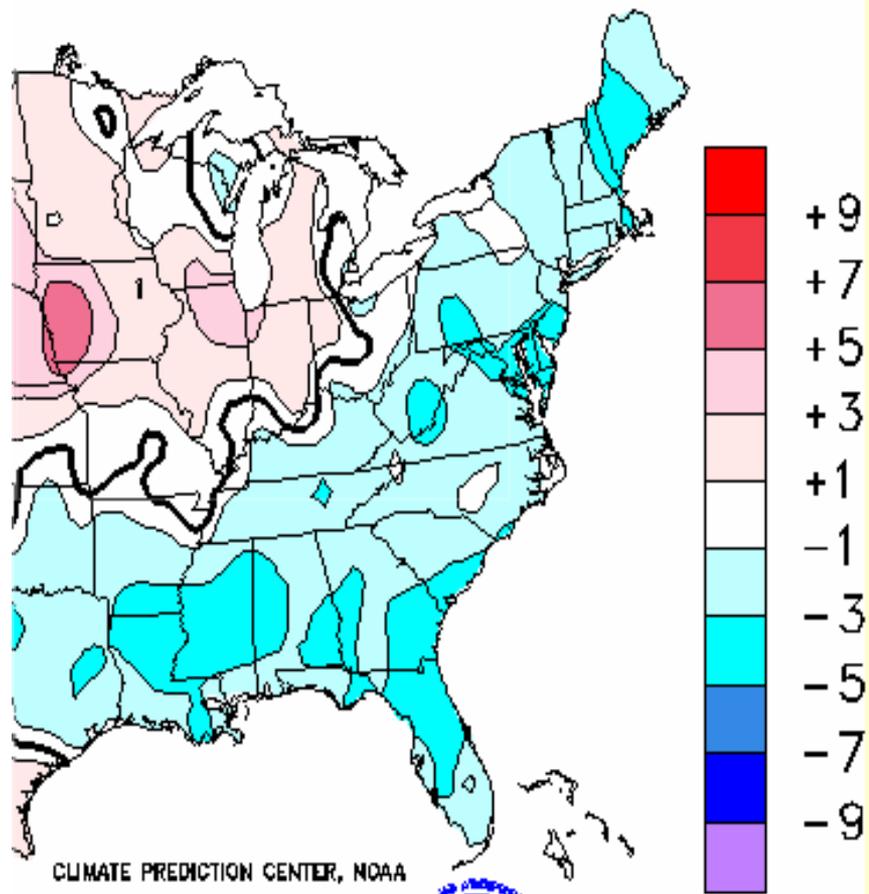


U.S. EAST TEMPERATURE : JUN 11 – 20, 2002

AVERAGE (F)



DEPARTURE FROM NORMAL



CLIMATE PREDICTION CENTER, NOAA

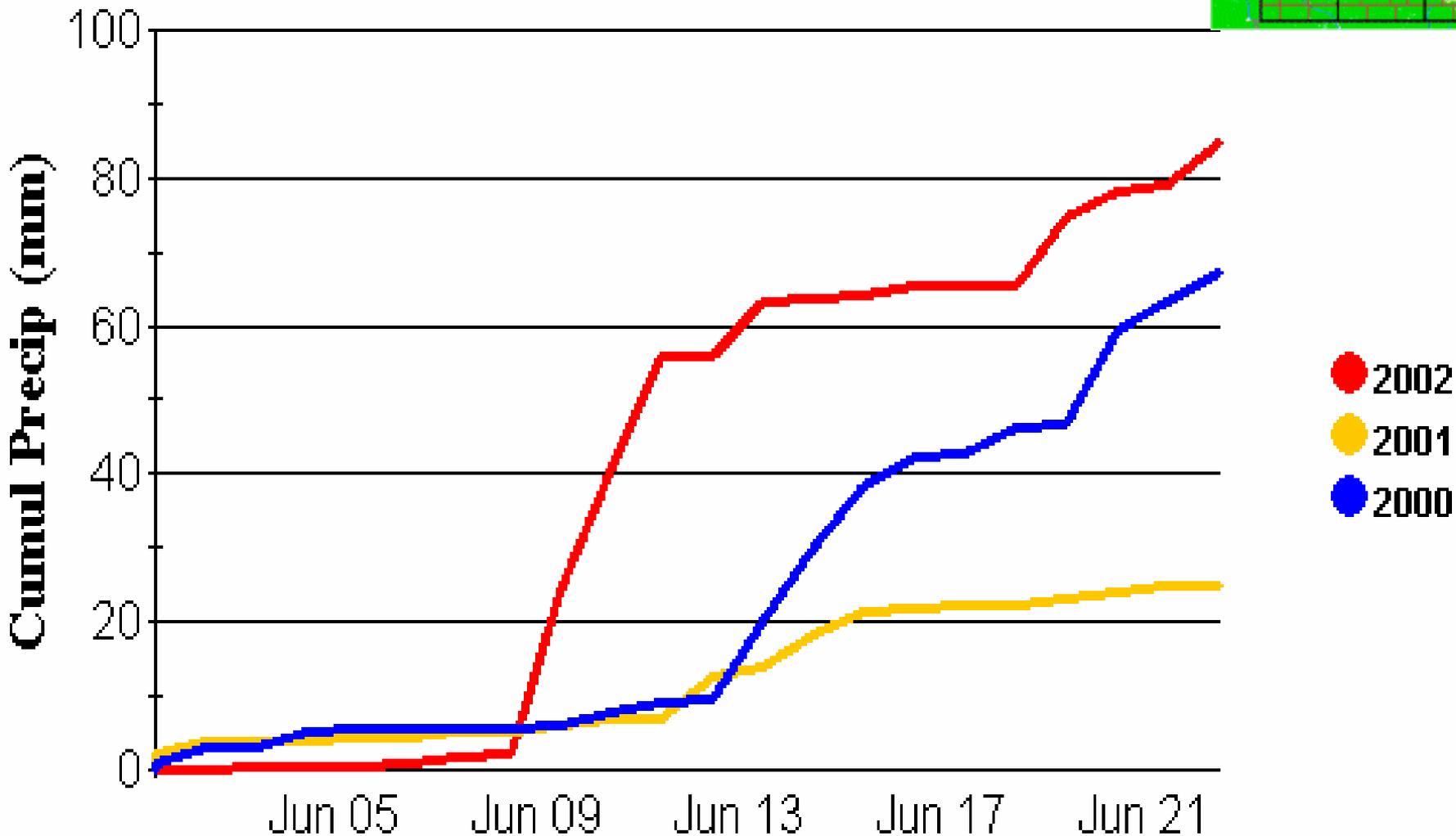
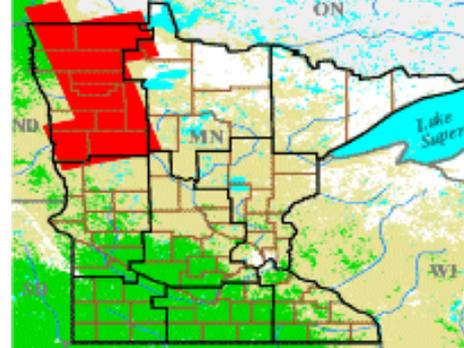
Computer generated contours

Based on preliminary data

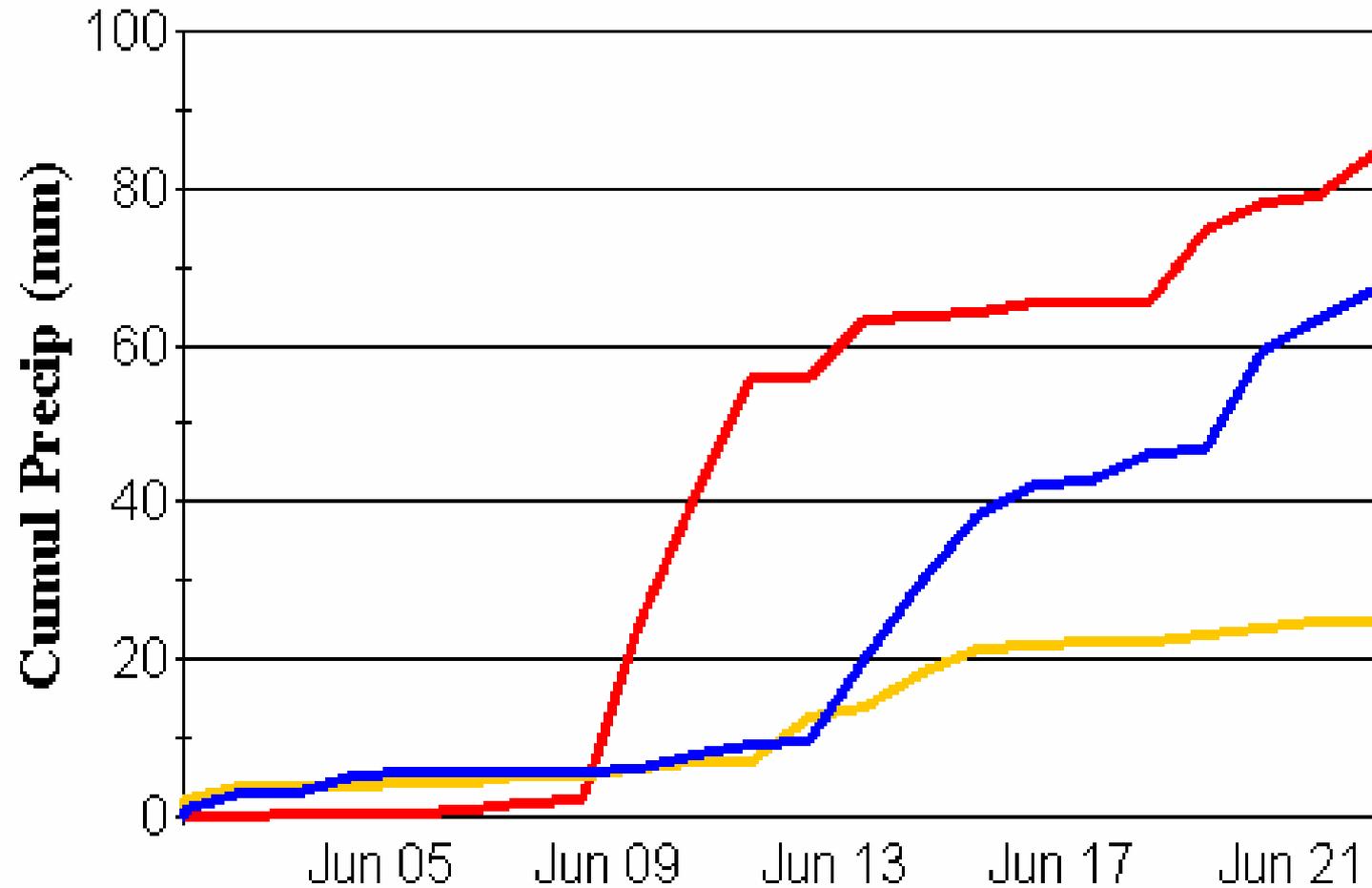
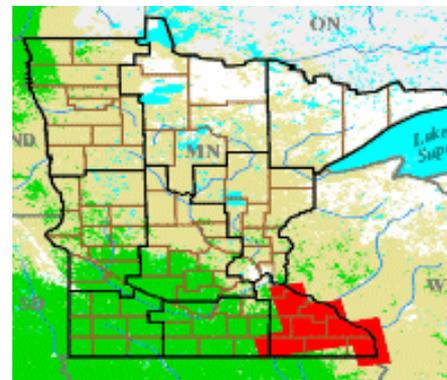


CUMULATIVE PRECIPITATION

JUNE 1 – 22, 2002

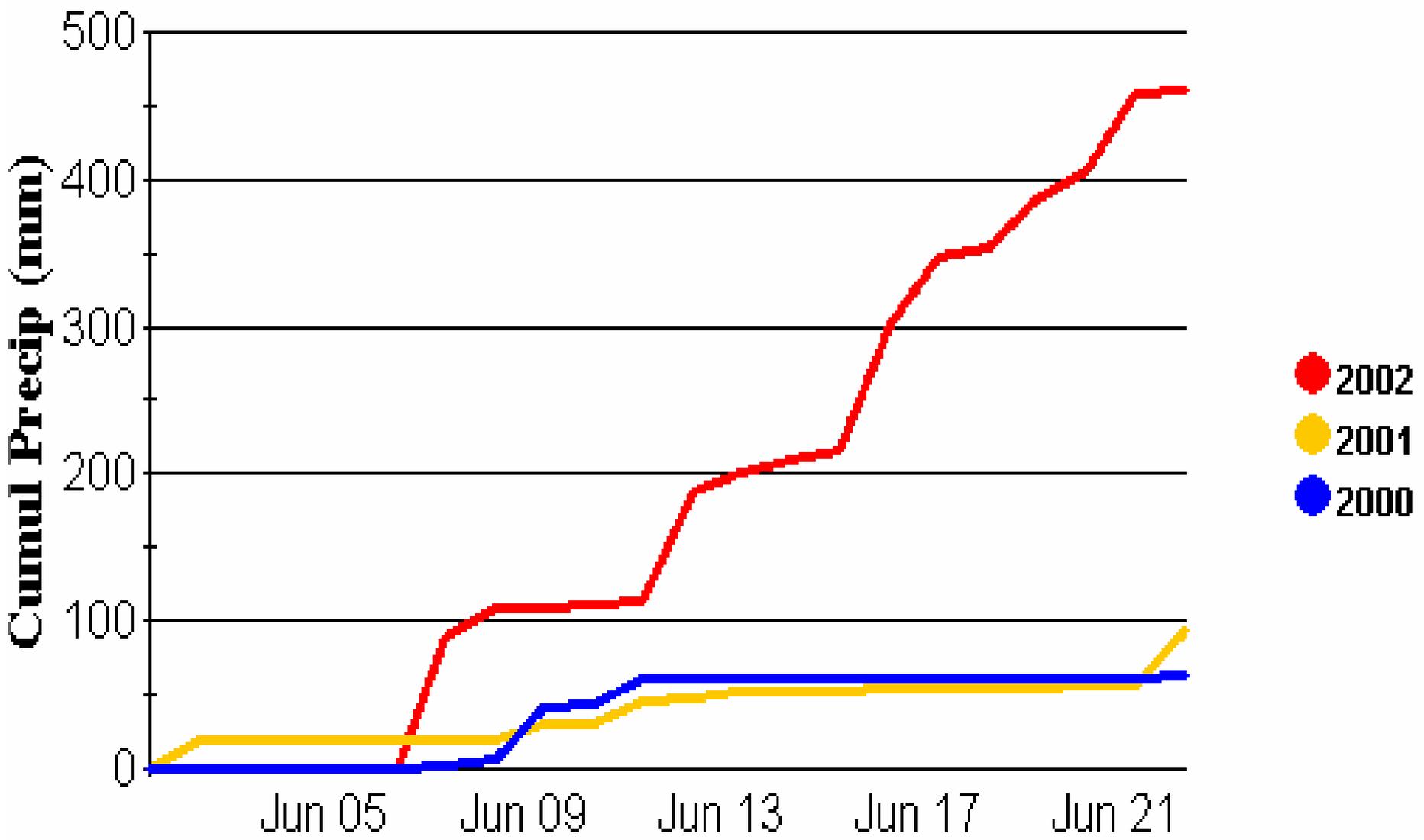


MINNESOTA: S.E. CRD CUMULATIVE PRECIPITATION JUNE 1 – 22, 2002



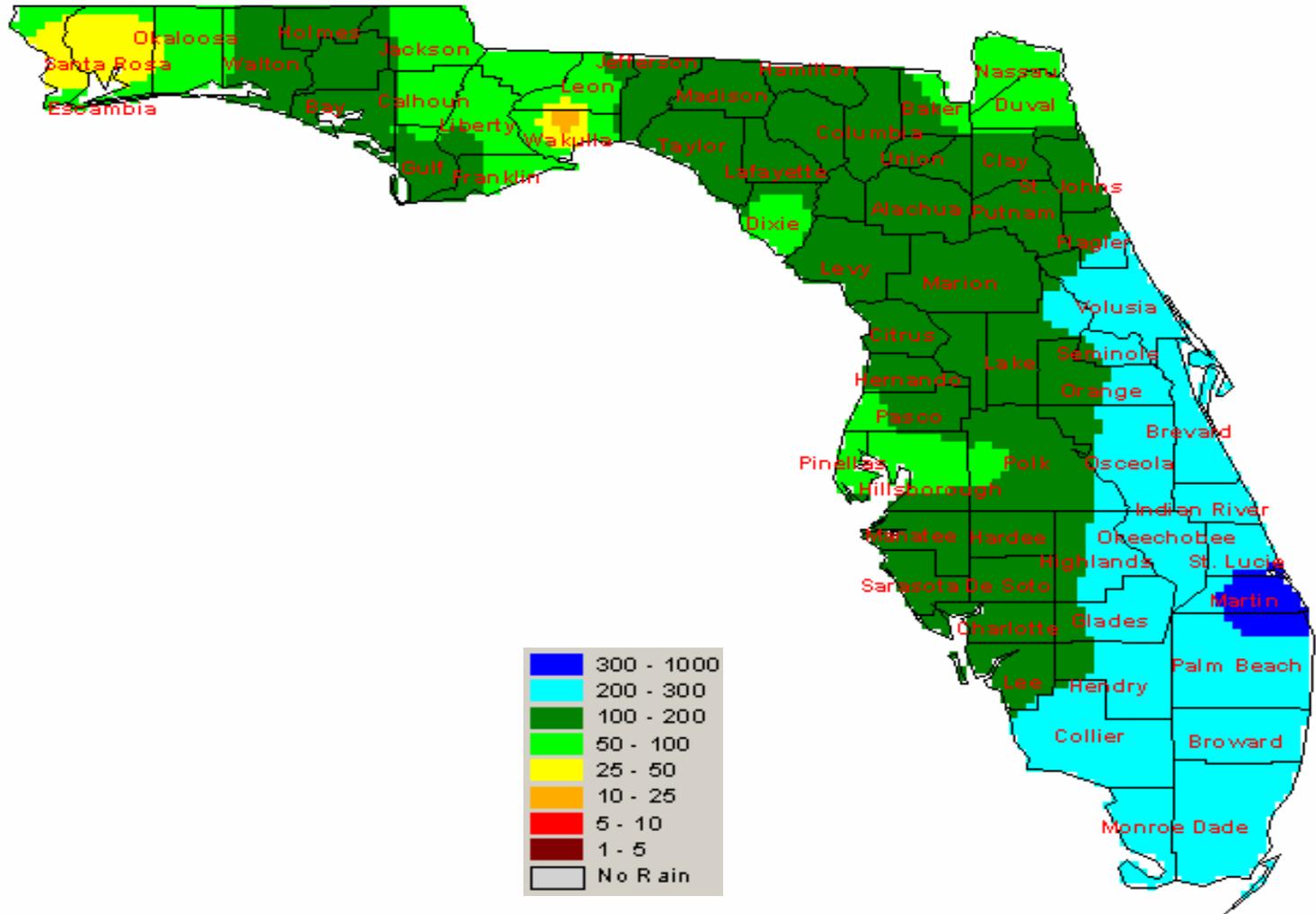
- 2002
- 2001
- 2000

WEST PALM BEACH, FL: CUMULATIVE PRECIPITATION



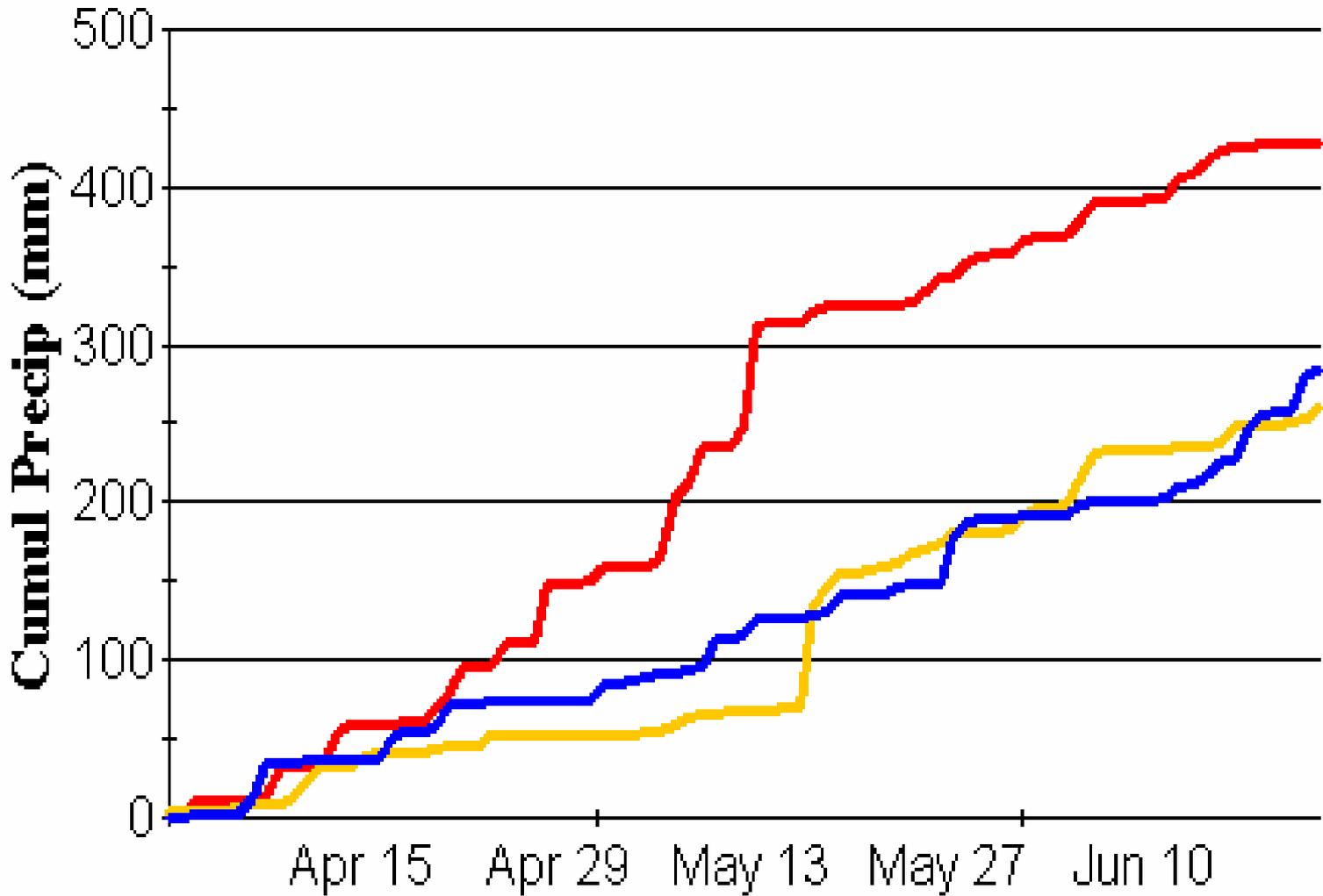
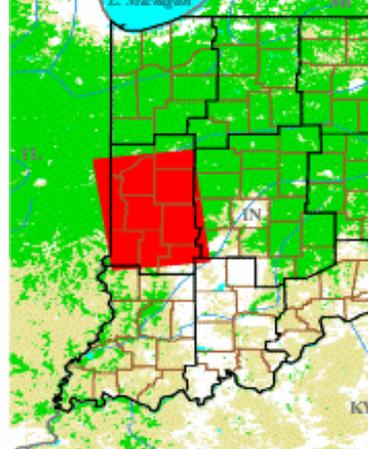
USAF GRIDDED DATA

FLORIDA: JUNE 1 – 22, 2002 CUMULATIVE RAINFALL (mm)



INDIANA: WESTERN CRD

APRIL 1 – JUNE 22 CUMULATIVE PRECIPITATION



- 2002
- 2001
- 2000

USAF GRIDDED DATA

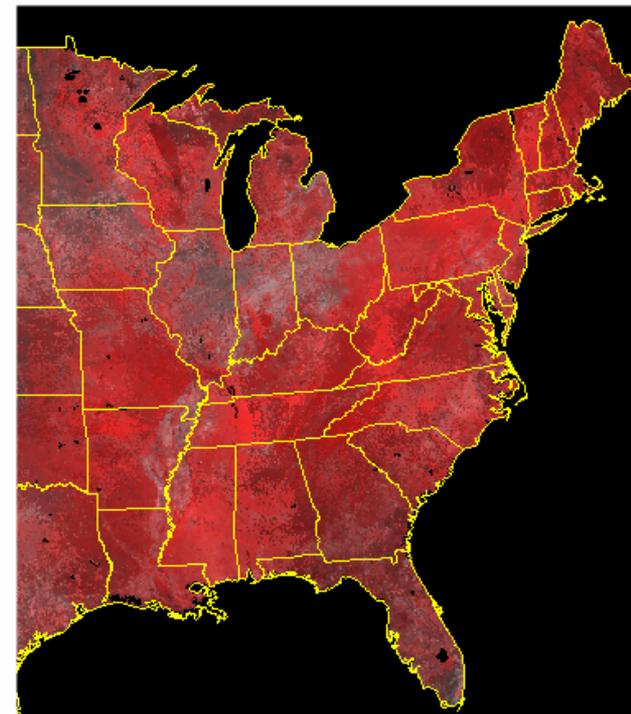
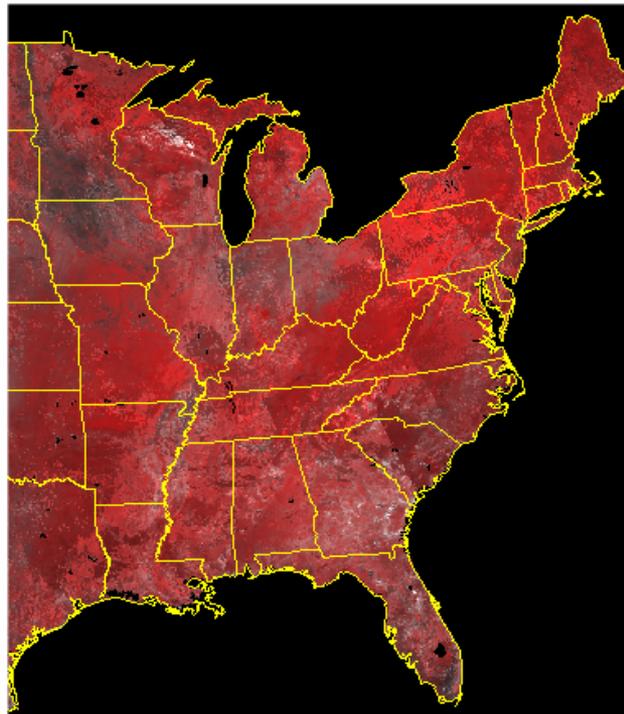
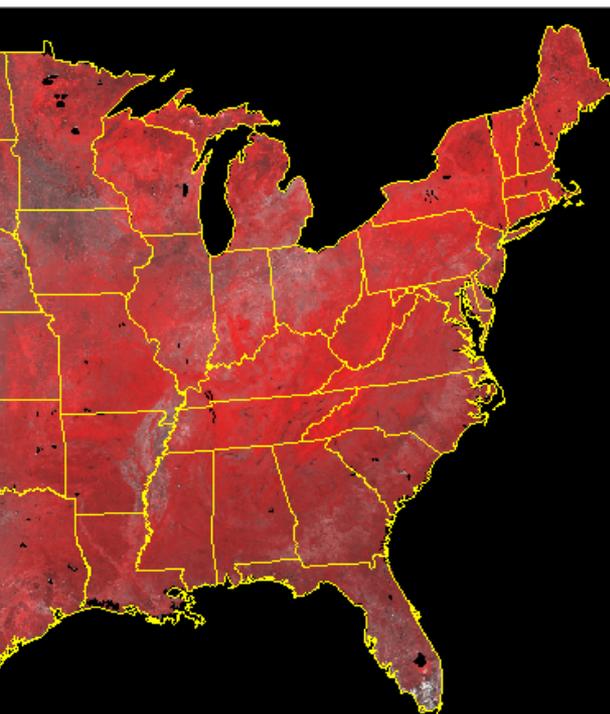
COMPARISON OF AVHRR COMPOSITES

JUNE 1 - 15

2000

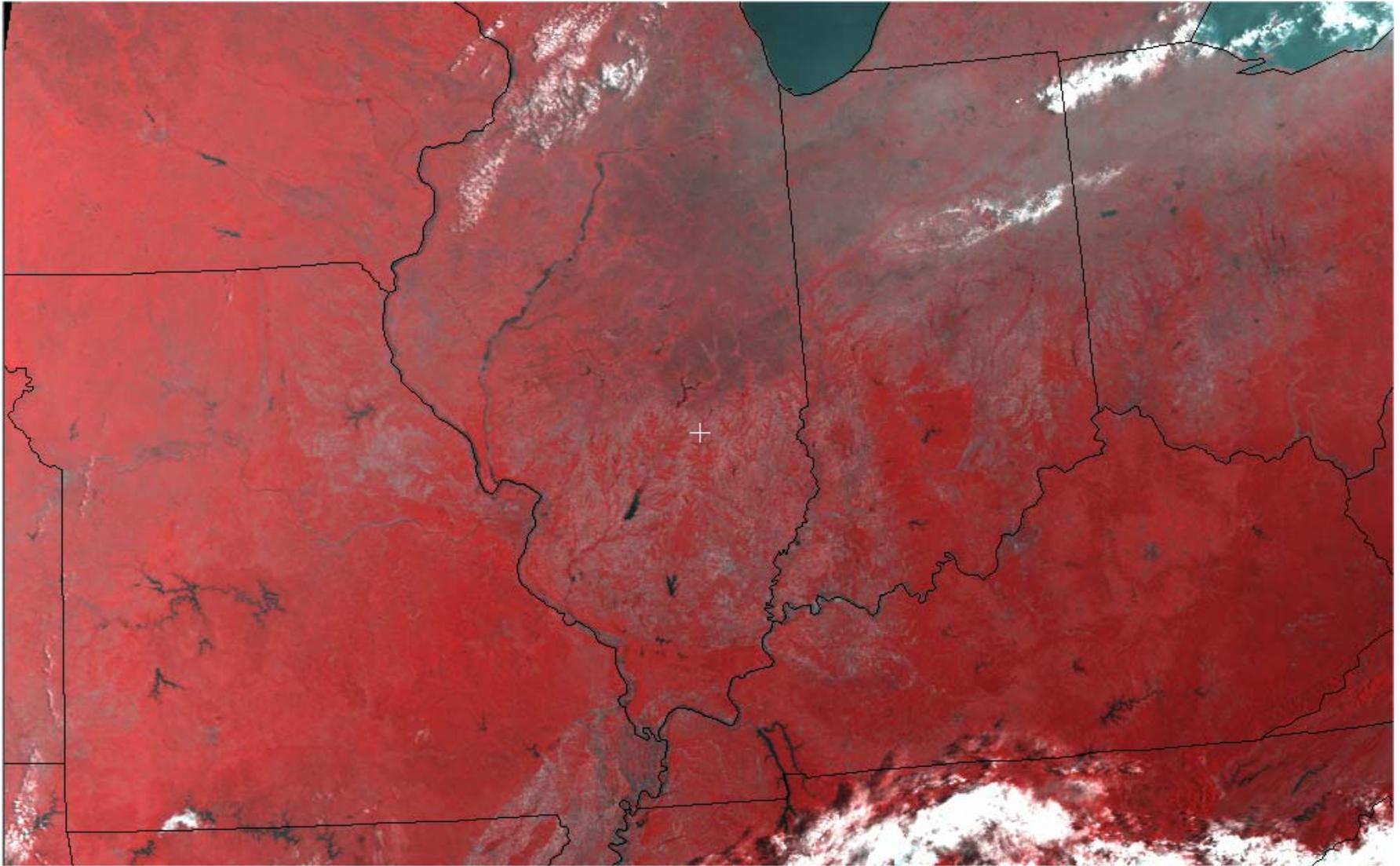
2001

2002



The 2002 growing season in the central Corn belt states of Illinois, Indiana, and Ohio is characterized by delays in emergence as indicated by the dark gray tones. Following the earlier heavy rains, excessively wet soil conditions are evident in northwestern Minnesota and parts of northern Wisconsin.

MIDWEST: JUNE 23, 2002 AVHRR



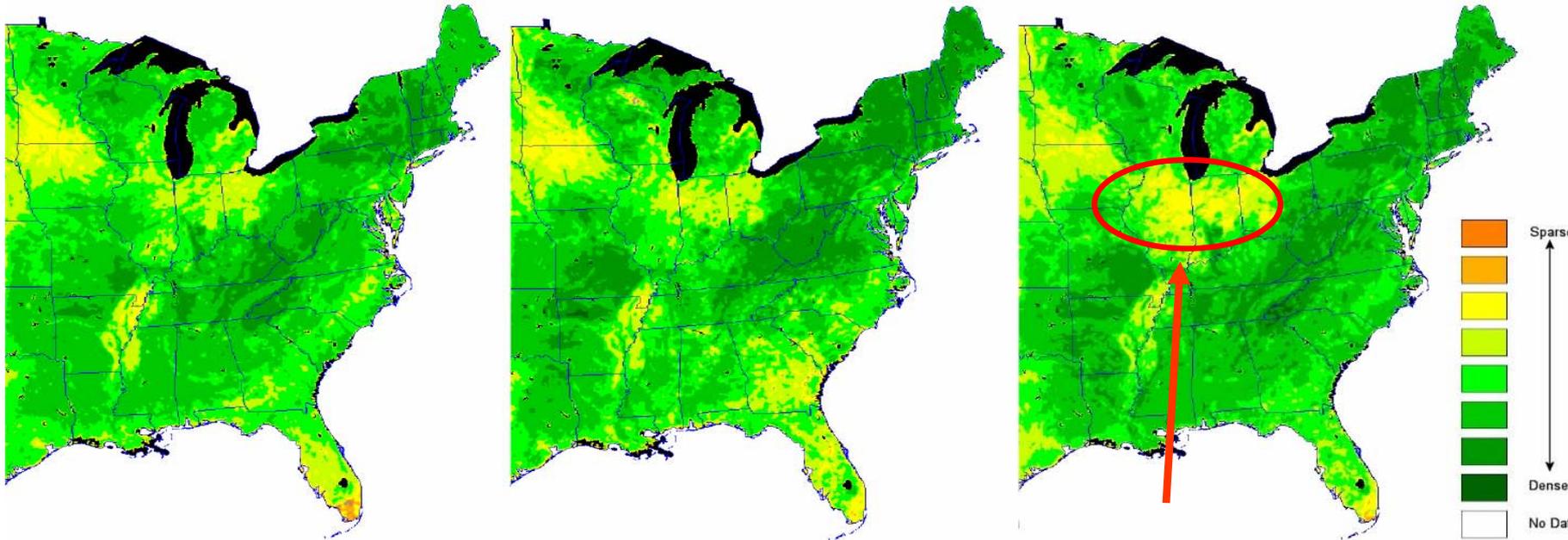
NOAA-15, CH. 2, 1, 1 = RGB

NORMALIZED DIFFERENCE VEGETATION INDEX: JUNE 1 - 15

2000

2001

2002



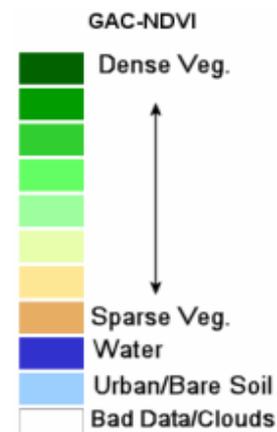
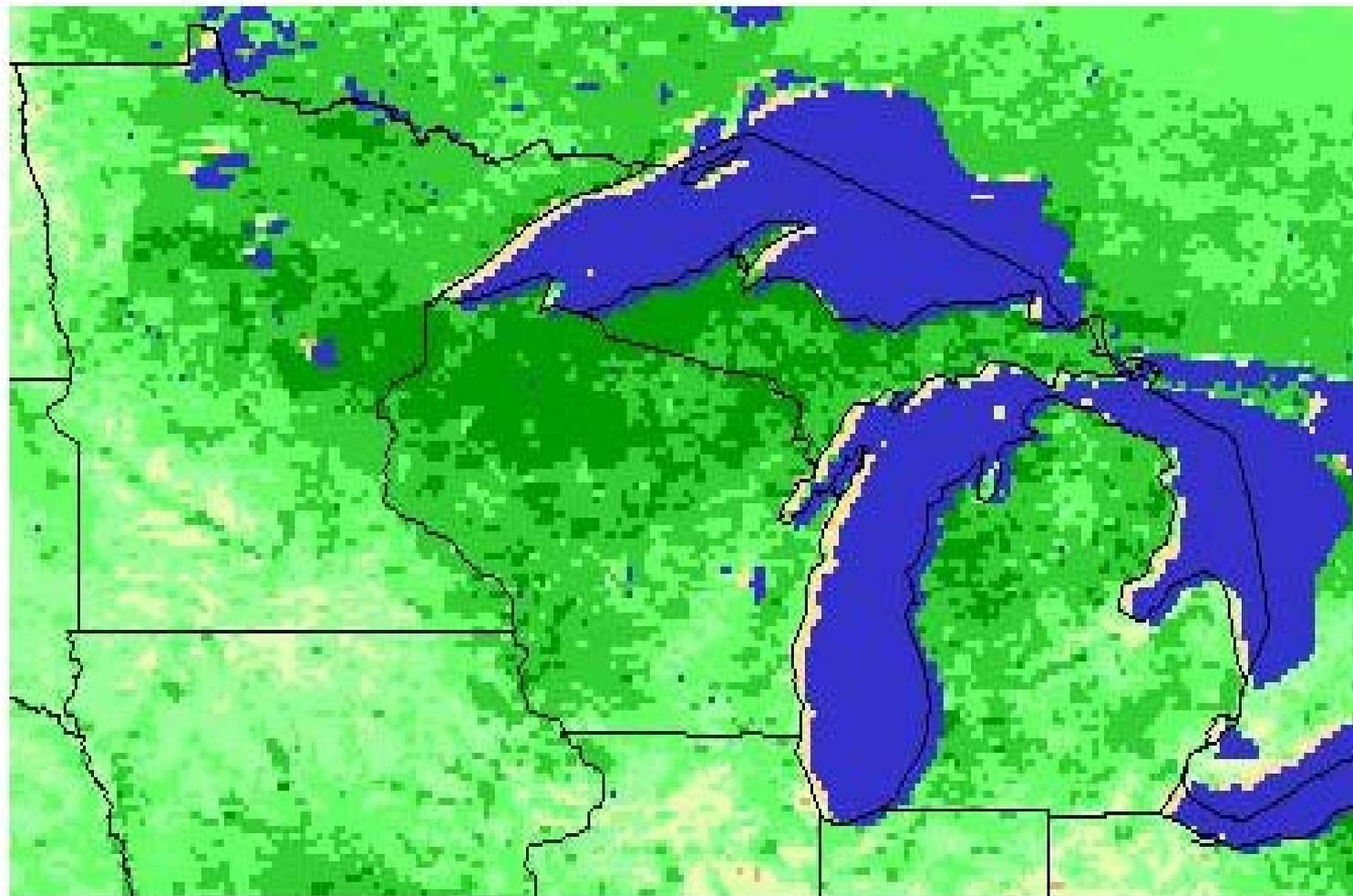
Delay in green-up

A comparison of the NOAA/AVHRR Normalized Difference Vegetation Index (NDVI) for the period June 1-15 of 2000, 2001, and 2002 shows this year's delay in green-up in Illinois, Indiana, and Ohio. This was induced by heavy rainfall during April and May of this year in the central Corn Belt. Vegetation conditions in the northern Corn Belt and the northeast are comparable to both 2000 and 2001. Vegetation conditions during 2002 in the south and southeast are relatively better than in both 2000 and 2001. Both North and South Carolina appear to have recovered from the earlier dryness.

EASTERN UNITED STATES: NORTHERN CORN BELT

GAC-NDVI (AVHRR/NOAA)

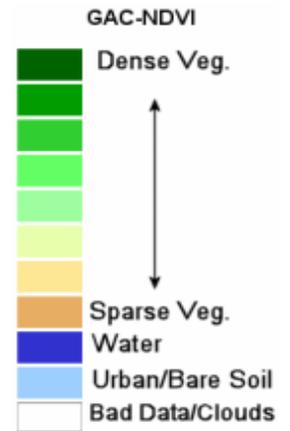
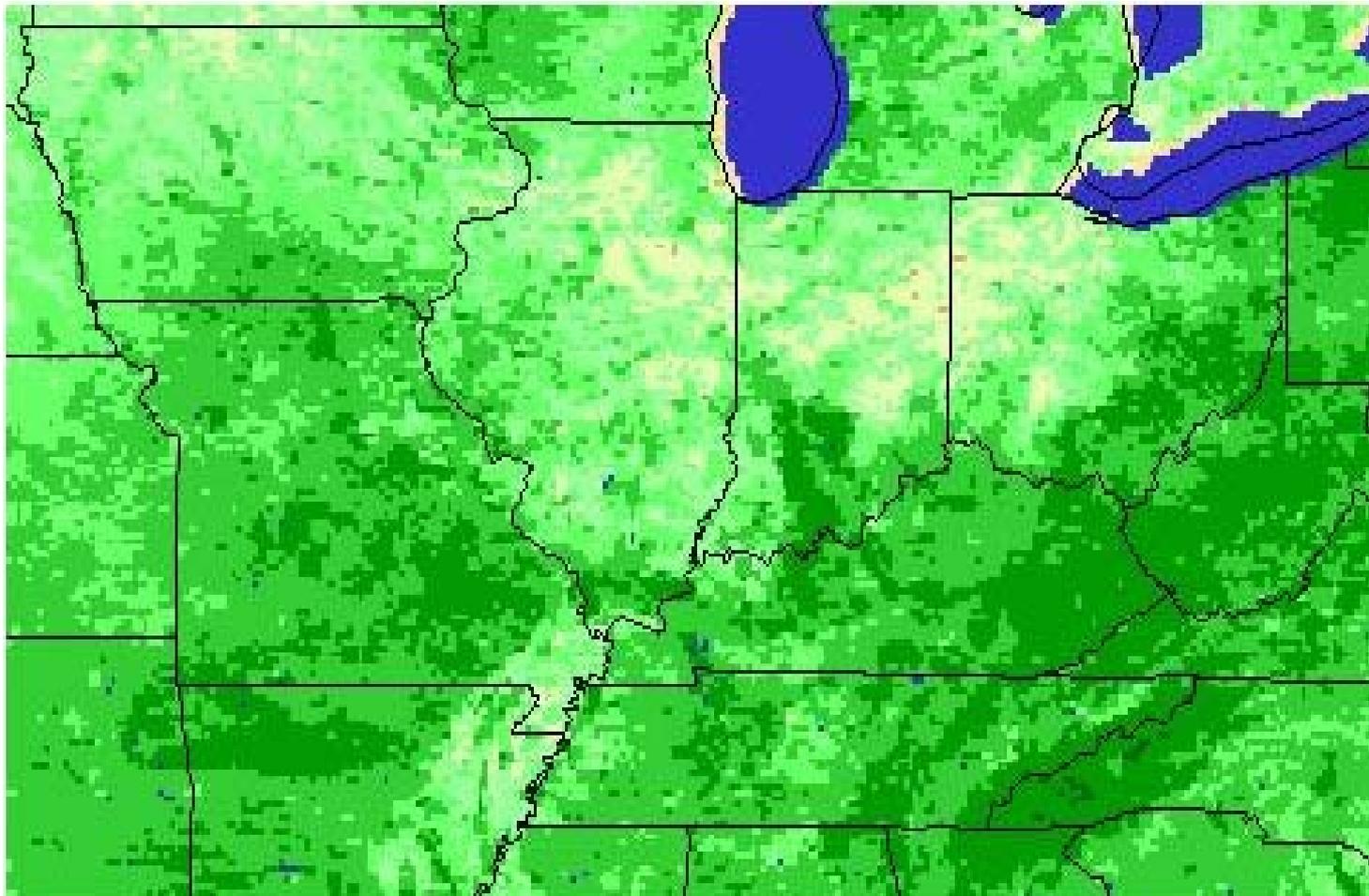
JUN 11 - 20 2002



EASTERN UNITED STATES: CORN BELT

GAC-NDVI (AVHRR/NOAA)

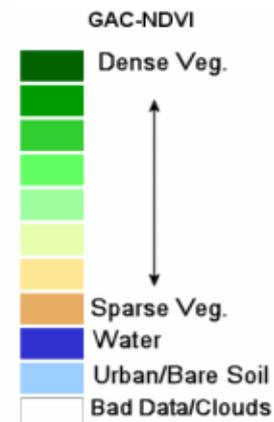
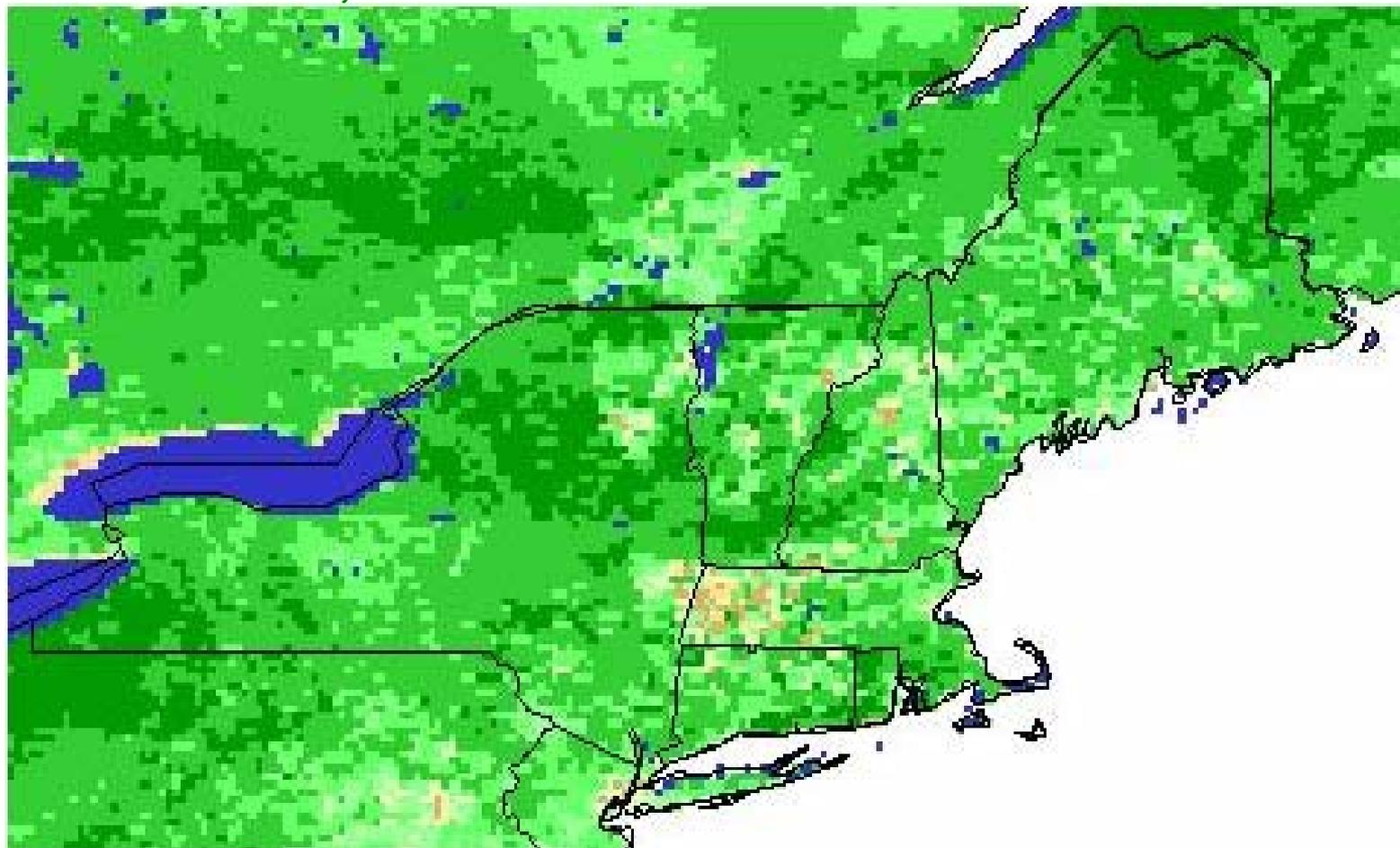
JUNE 11 - 20, 2002



EASTERN UNITED STATES: NORTHEASTERN STATES

GAC-NDVI (AVHRR/NOAA)

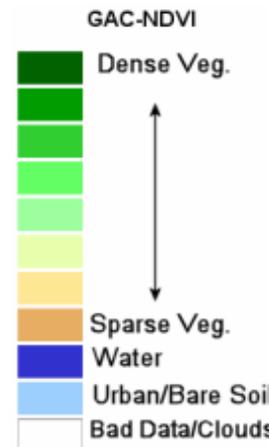
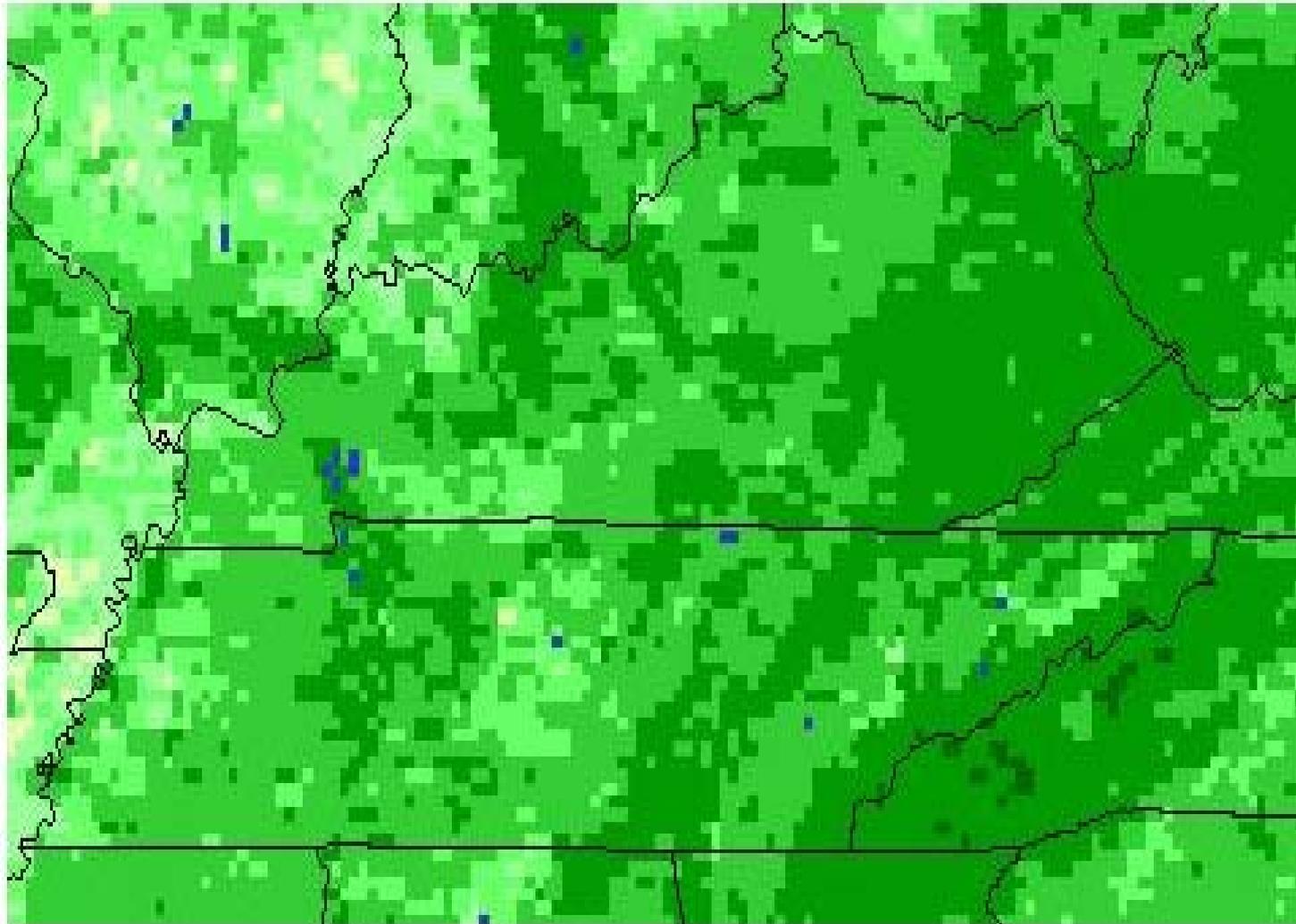
JUNE 11 - 20, 2002



EASTERN UNITED STATES: BLUEGRASS STATES

GAC-NDVI (AVHRR/NOAA)

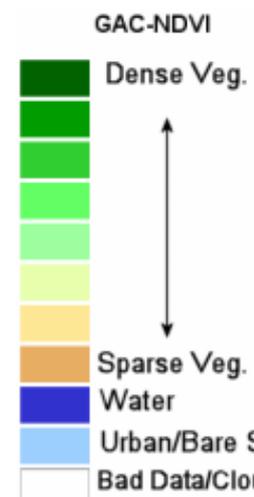
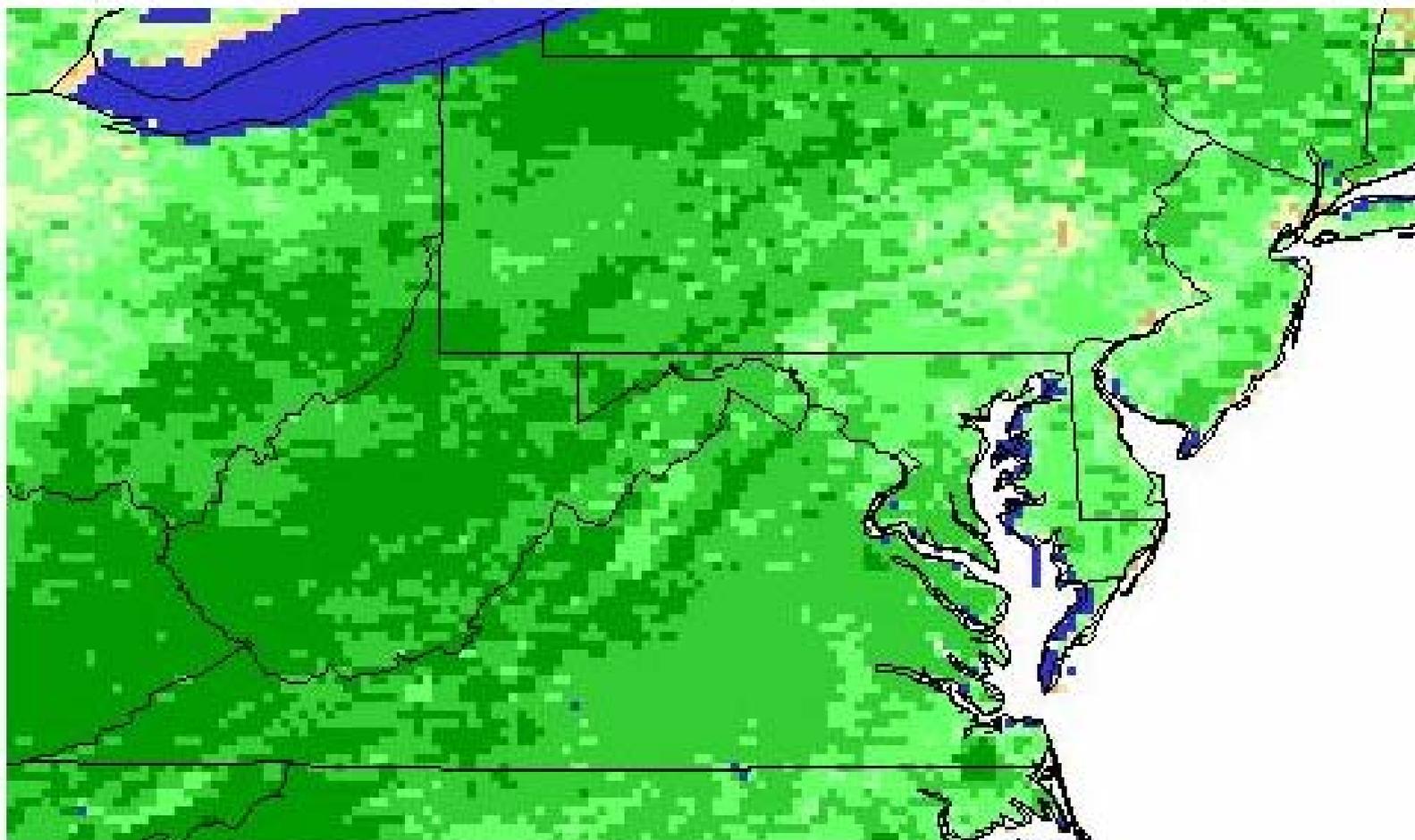
JUNE 11 - 20, 2002



EASTERN UNITED STATES: MID-ATLANTIC STATES

GAC-NDVI (AVHRR/NOAA)

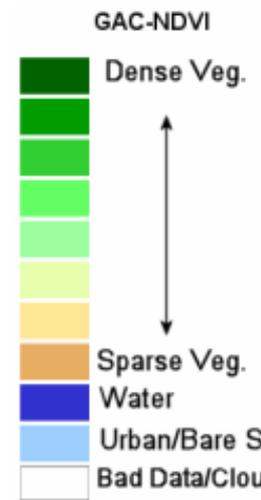
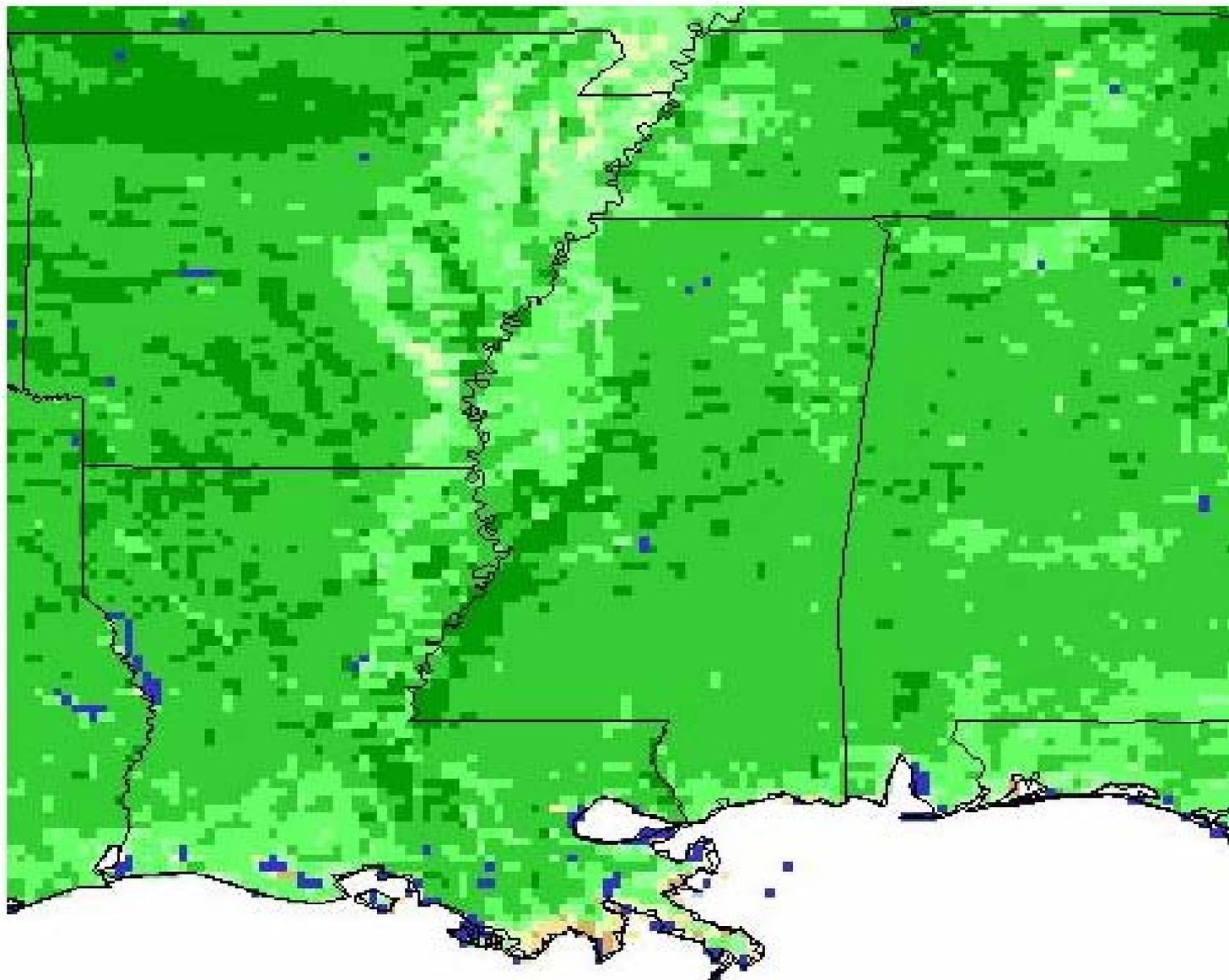
JUNE 11 - 20, 2002



EASTERN UNITED STATES: DELTA STATES

GAC-NDVI (AVHRR/NOAA)

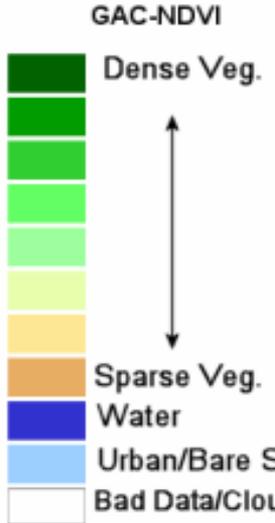
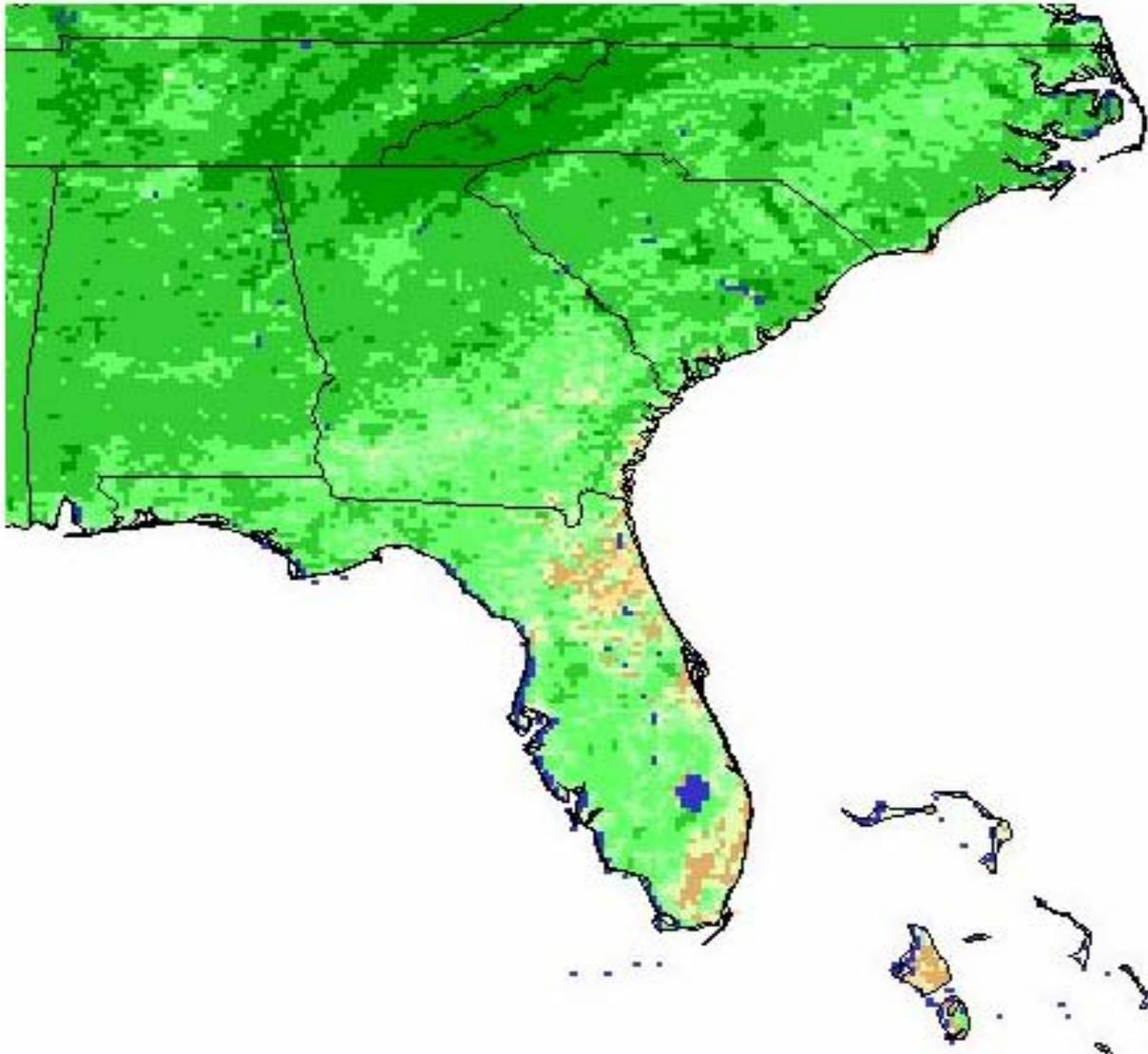
JUNE 11 - 20, 2002



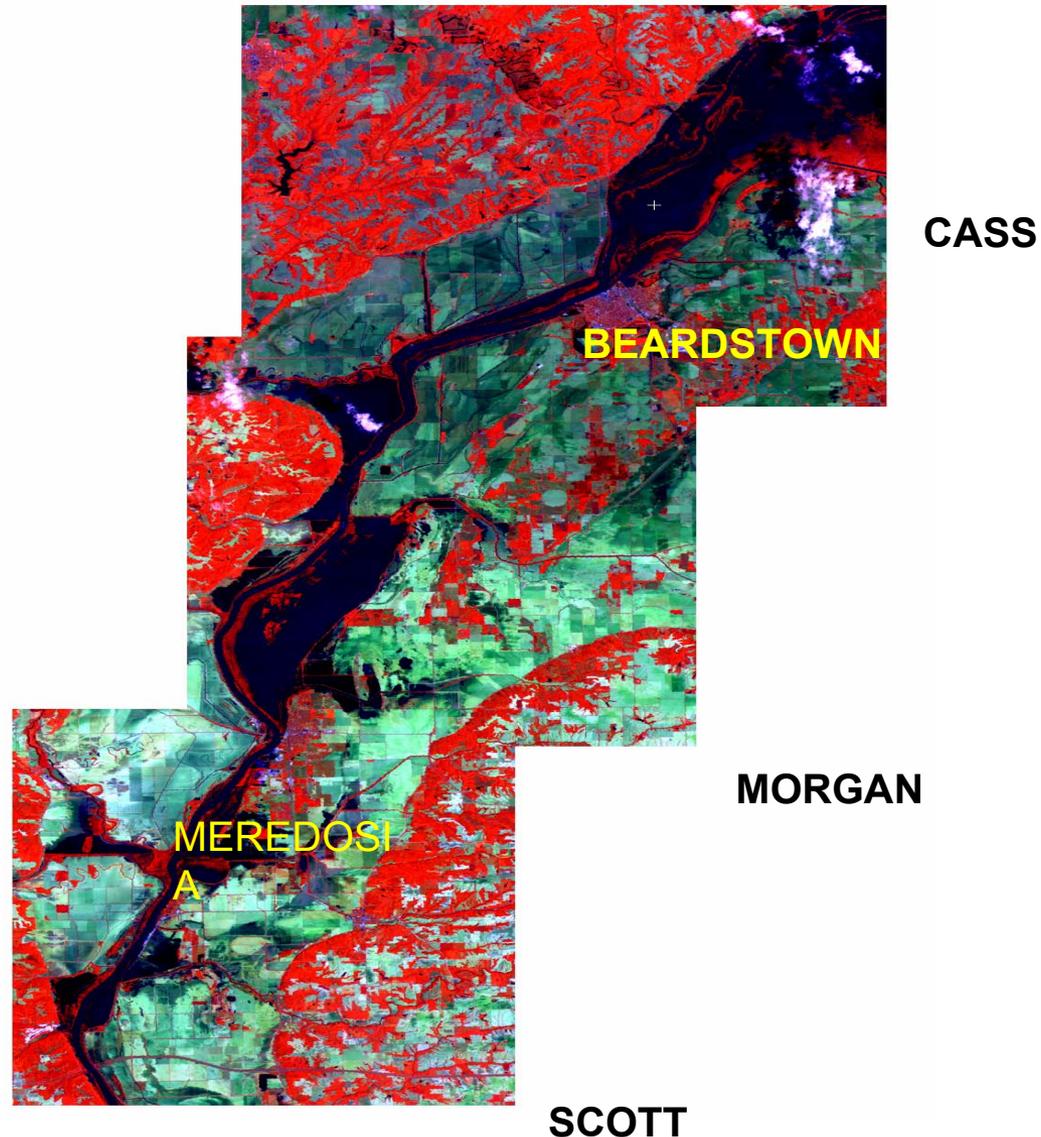
EASTERN UNITED STATES: SOUTHEASTERN STATES

GAC-NDVI (AVHRR/NOAA)

JUNE 11 - 20, 2002

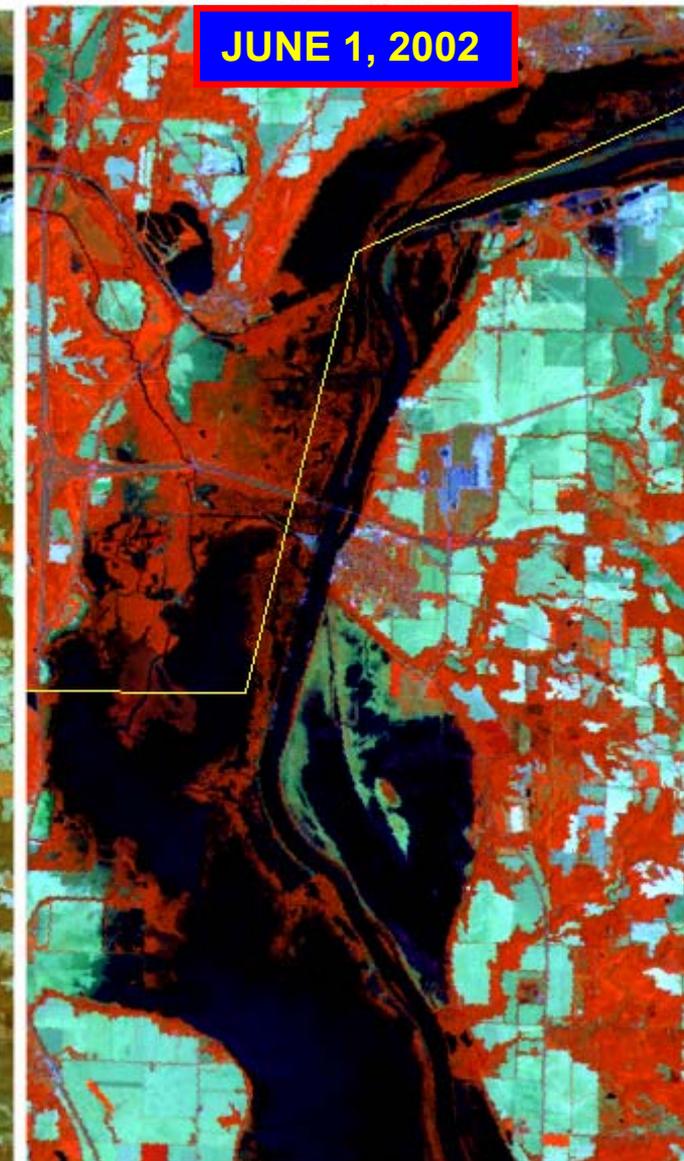


FOLLOWING THE ILLINOIS RIVER ACROSS SCOTT, MORGAN & CASS COUNTIES IN ILLINOIS



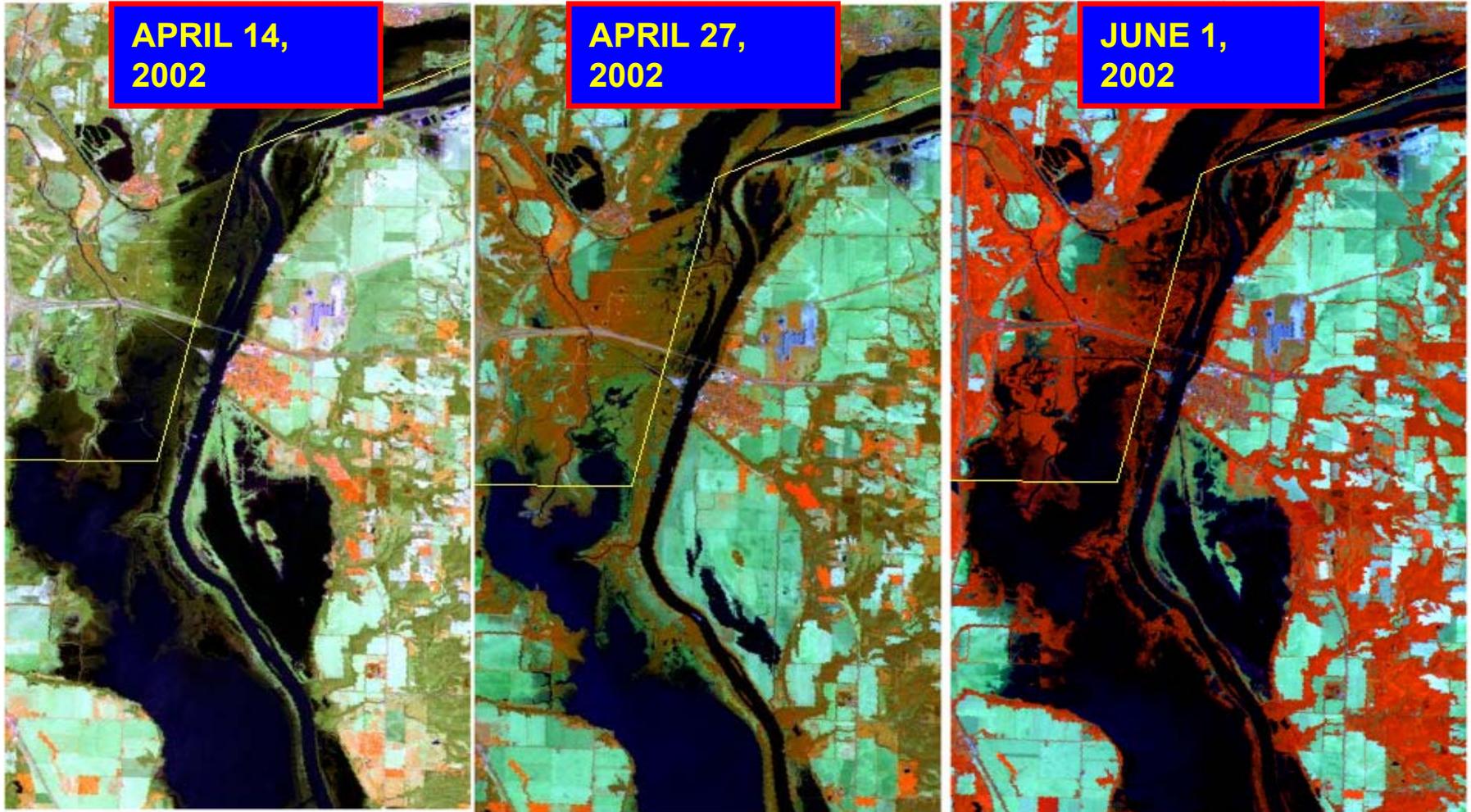
Landsat-7 ETM+ CH. 4, 5, 3 = RGB JUNE 1, 2002

PUTNAM COUNTY, ILLINOIS: ILLINOIS RIVER UPDATE



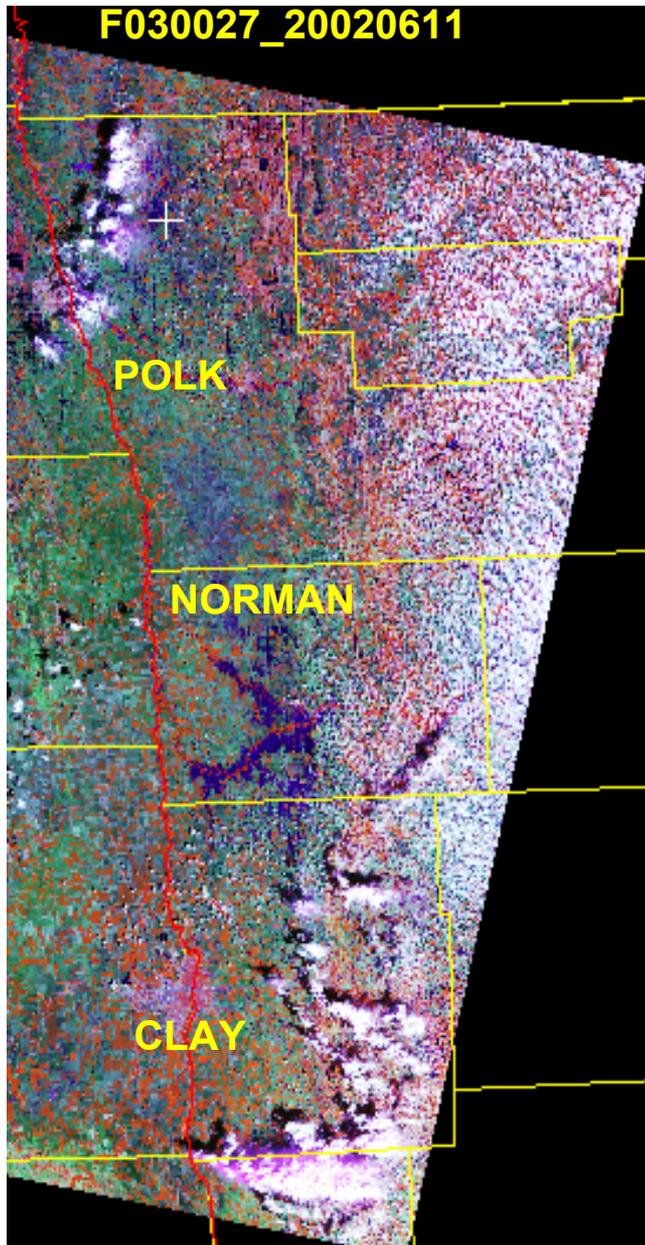
Landsat-7 ETM+, CH. 4, 5, 3 = RGB

PUTNAM COUNTY, ILLINOIS: ILLINOIS RIVER UPDATE



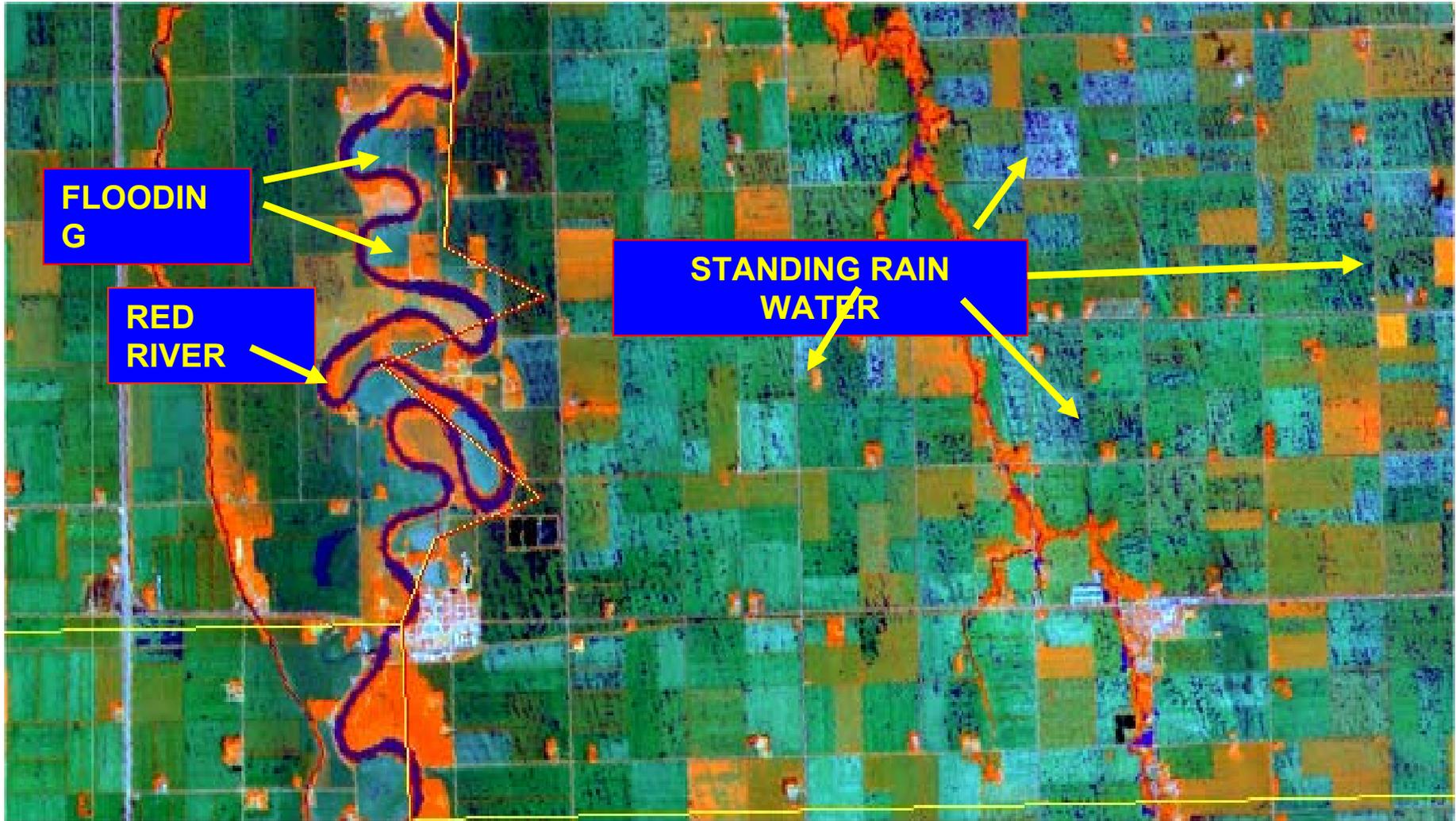
Landsat-7 ETM+, CH. 4, 5, 3 = RGB

FLOODING IN N.W. MINNESOTA



- Heavy rainfall events during the second week of June caused severe flooding in Northwestern Minnesota.
- Several rivers, including the Roseau River, the Red River (East Grand Forks), the Marsh River, and the Wild Rice River were above the flood stage during the period June 11-16, 2002.
- Standing water discernible in many of the fields over a much of the region.
- Spring wheat & barley had just entered the heading stage.
- Corn & soybeans had already emerged and were in the early vegetative stage.
- Considerable damage to standing crops in prime agricultural areas of the state.
- Heavy rains resume in Minnesota.

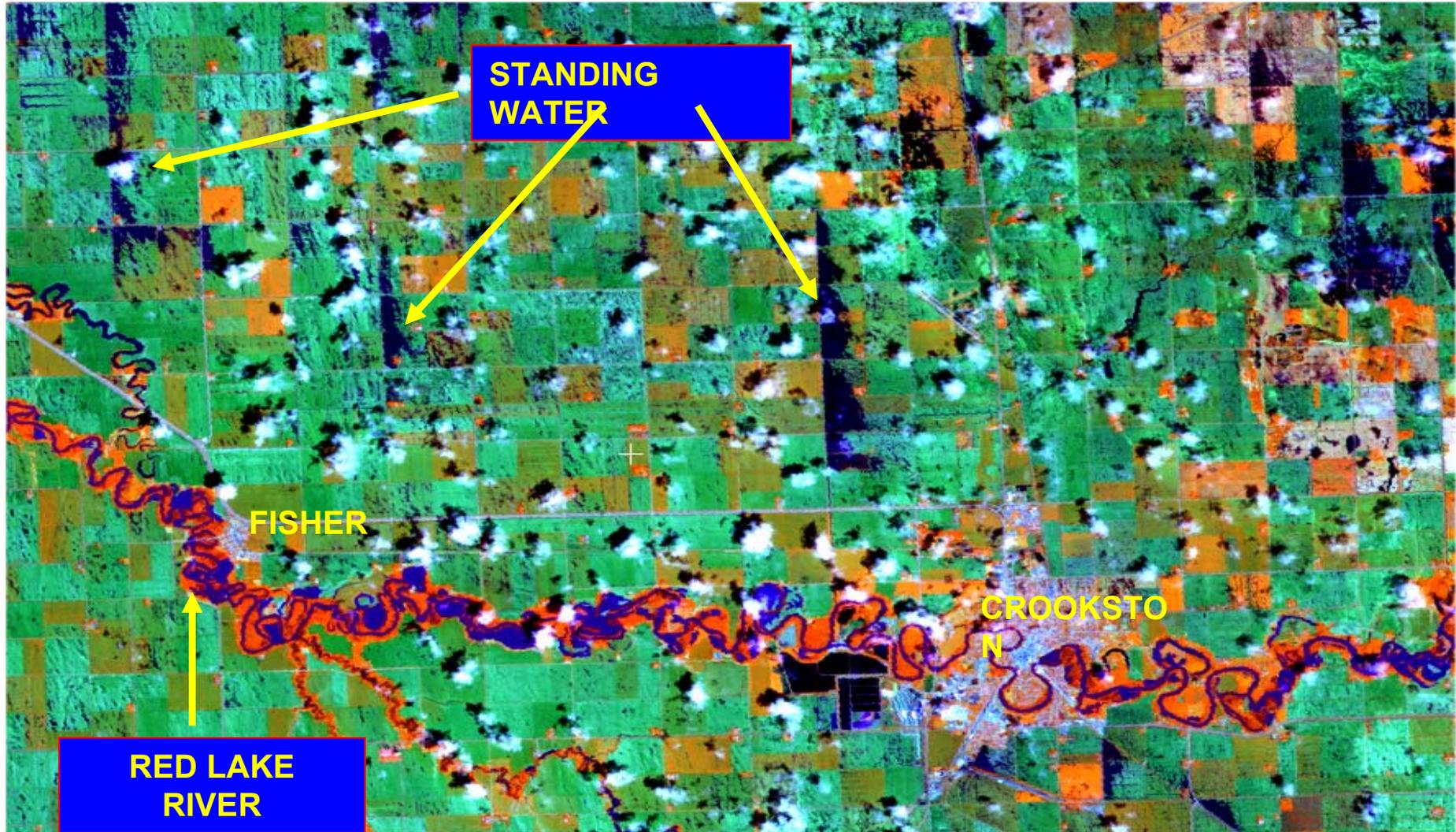
N.W. MINNESOTA FLOODING: S. KITTSON COUNTY



Landsat-7 ETM+, CH. 4, 5, 3 = RGB

JUNE 11, 2002

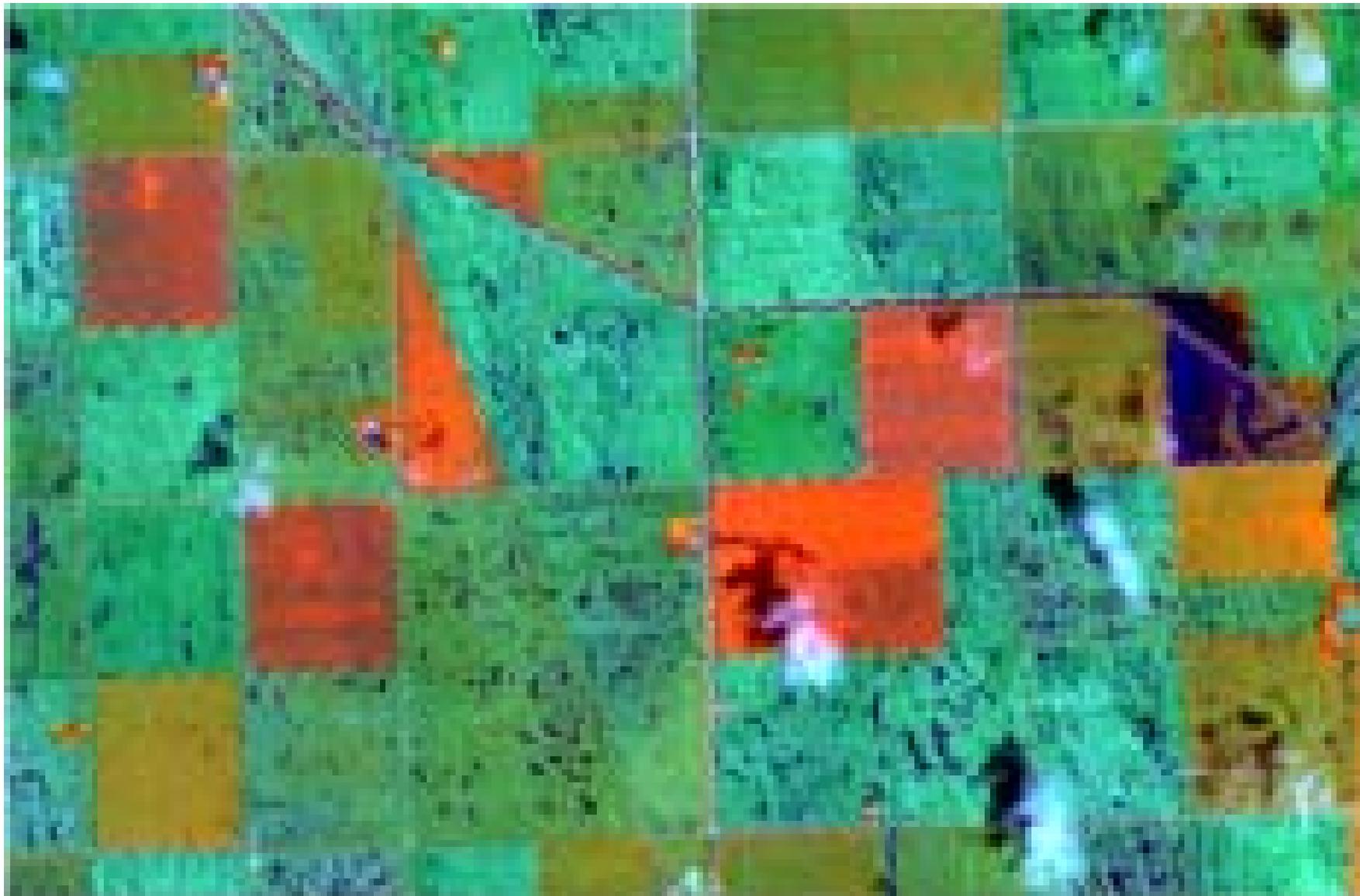
N.W. MINNESOTA FLOODING: W. POLK COUNTY



Landsat-7 ETM+, CH. 4, 5, 3 = RGB

JUNE 11, 2002

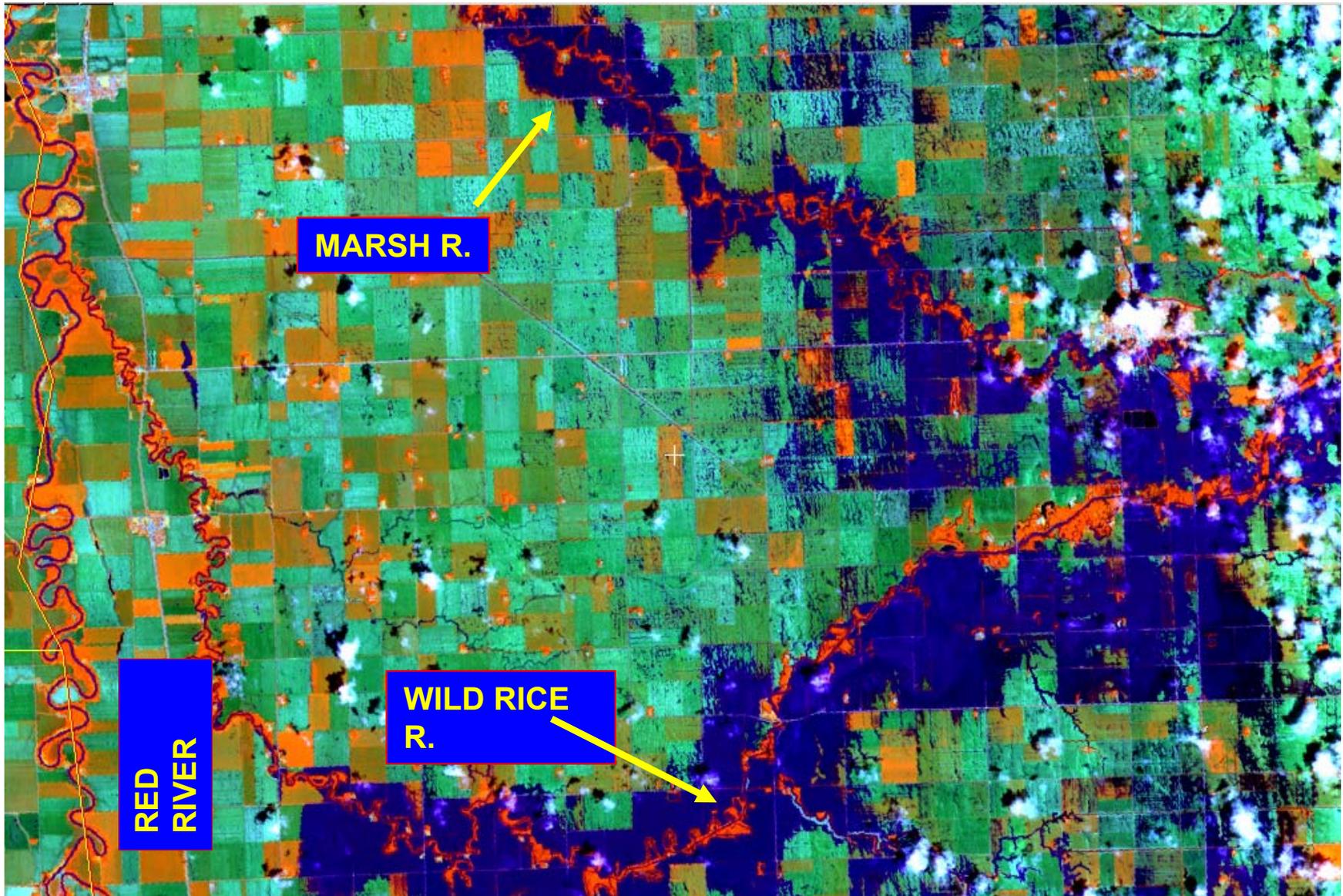
FLOODED CROPLAND IN S.W. POLK COUNTY



Landsat-7 ETM+, CH. 4, 5, 3 = RGB
2002

JUNE 11,

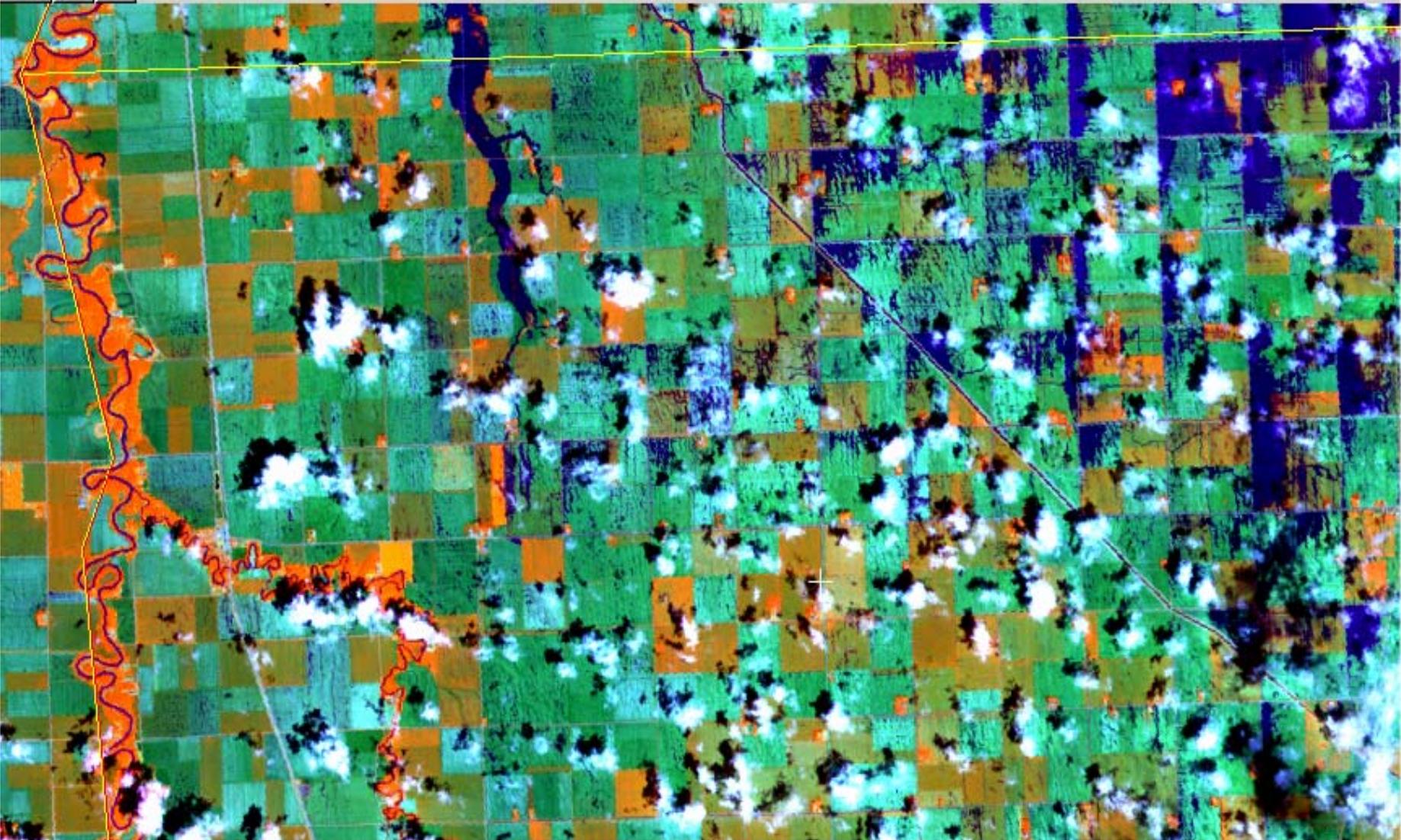
N.W. MINNESOTA FLOODING: NORMAN COUNTY



Landsat-7 ETM+, CH. 4, 5, 3 = RGB

JUNE 11, 2002

WESTERN MINNESOTA FLOODING: NORMAN COUNTY



Landsat-7 ETM+, CH. 4, 5, 3 = RGB

JUNE 11, 2002

US_EAST: 2002 WHEAT CROP PROGRESS & CONDITION

WINTER WHEAT: Currently being harvested in the south.

Crop Progress:

- ❑ Nearly 90 percent harvested in Arkansas and N. Carolina.
- ❑ Harvesting operations are on track in Missouri, Illinois, Indiana, & Ohio.

Crop Condition:

- ❑ About 15- 30 percent of the winter wheat crop is in Poor- V. Poor Condition in AR, IL, IN, and MO.
- ❑ The crop is generally doing fine in MI, OH, and NC.

SPRING WHEAT: Currently in the heading stage.

- ❑ MN is the only spring wheat state in the eastern half of the U.S.
- ❑ Heading is nearly on par with last year, but bit behind the 5 y average (8 / 7 / 26).
- ❑ 22 percent of the crop is in the Poor- V. Poor category.

US_EAST: 2002 CORN CROP PROGRESS

CORN: Fully emerged and in the vegetative stage.

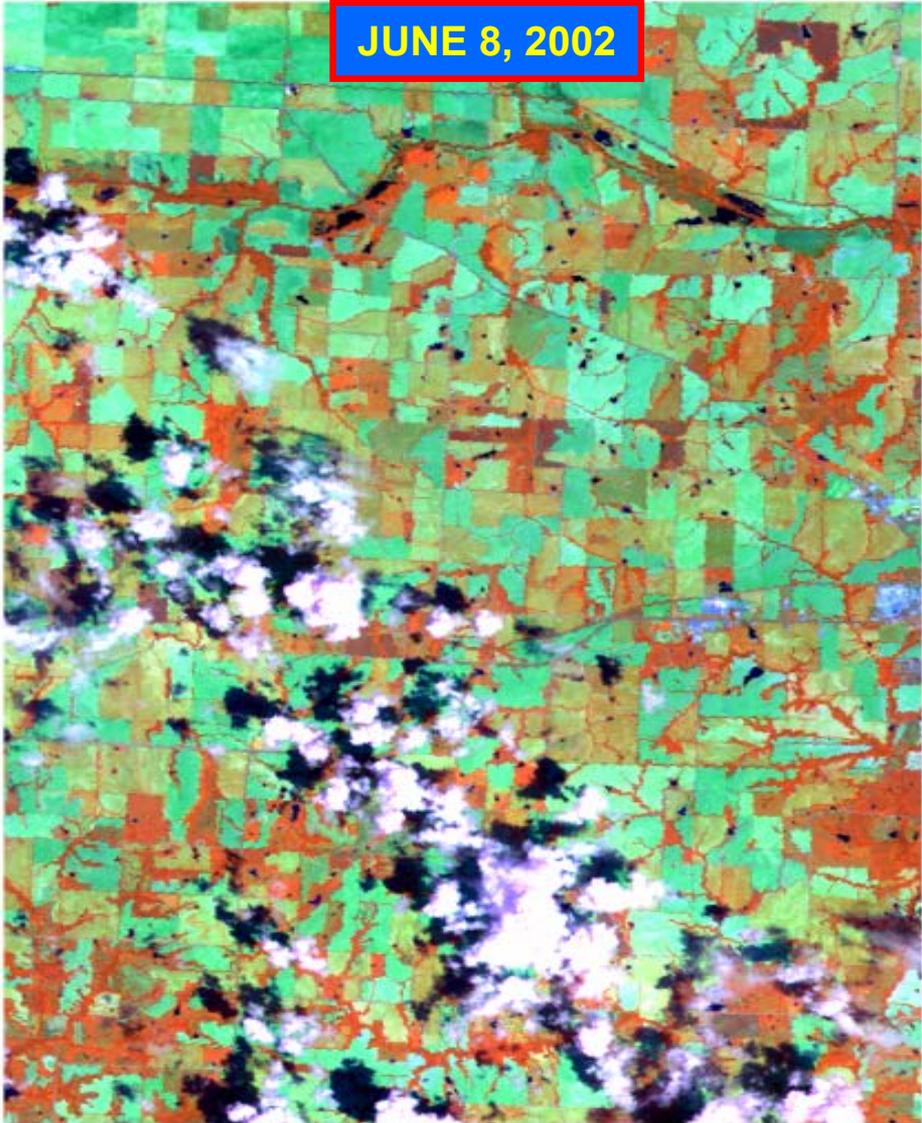
- Heavy rains in Northwestern and Southern Minnesota resulted in standing water over many fields. The newly emerged corn plants may have suffered some flood damage.

CROP CONDITION:

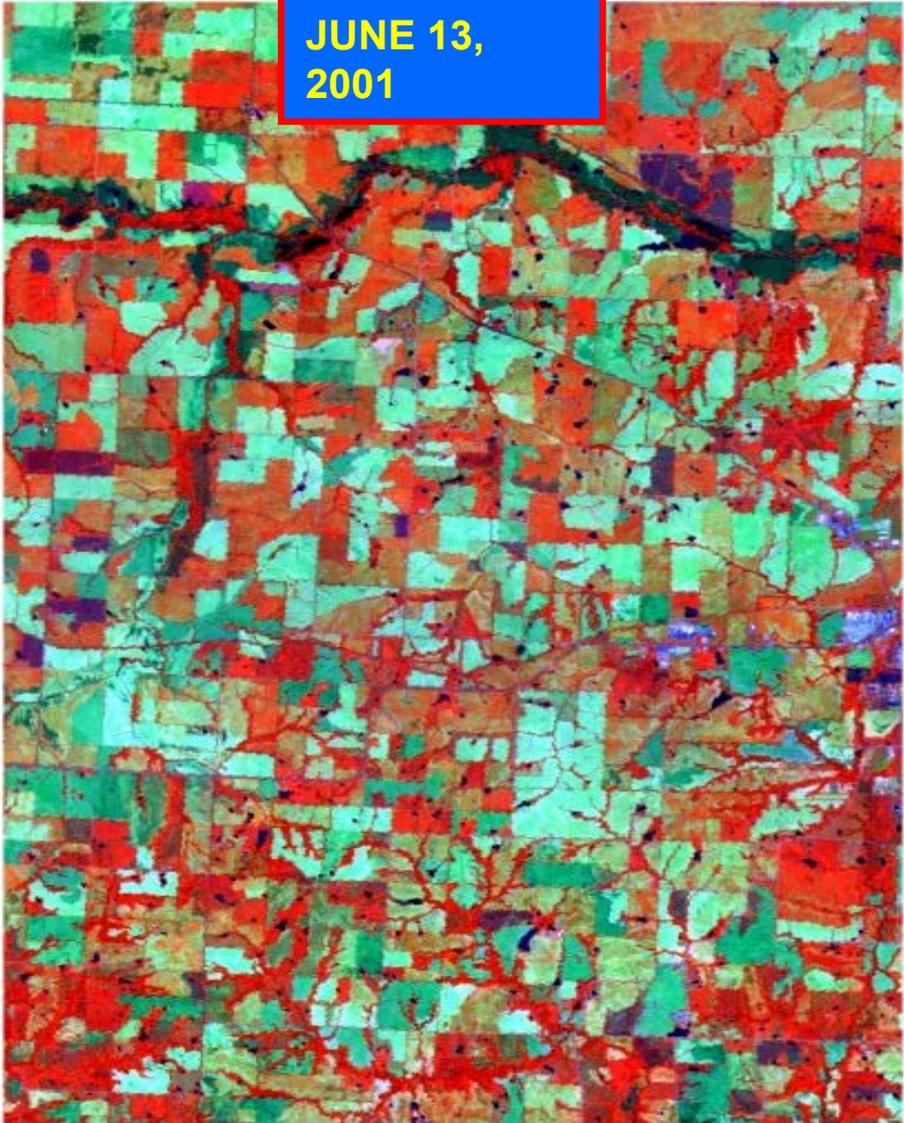
- Generally Fair – Excellent, with about 10 percent of the crop in Poor – V. Poor condition.
- Minor problems in North Carolina (27% in Poor – V. Poor)

SALINE COUNTY, MISSOURI (#1 CORN, #3 SOY)

JUNE 8, 2002



JUNE 13, 2001



TM

Landsat-7 ETM+

CH. 4, 5, 3 = R, G, B

Landsat-5

CLINTON COUNTY, IOWA (#9 CORN)

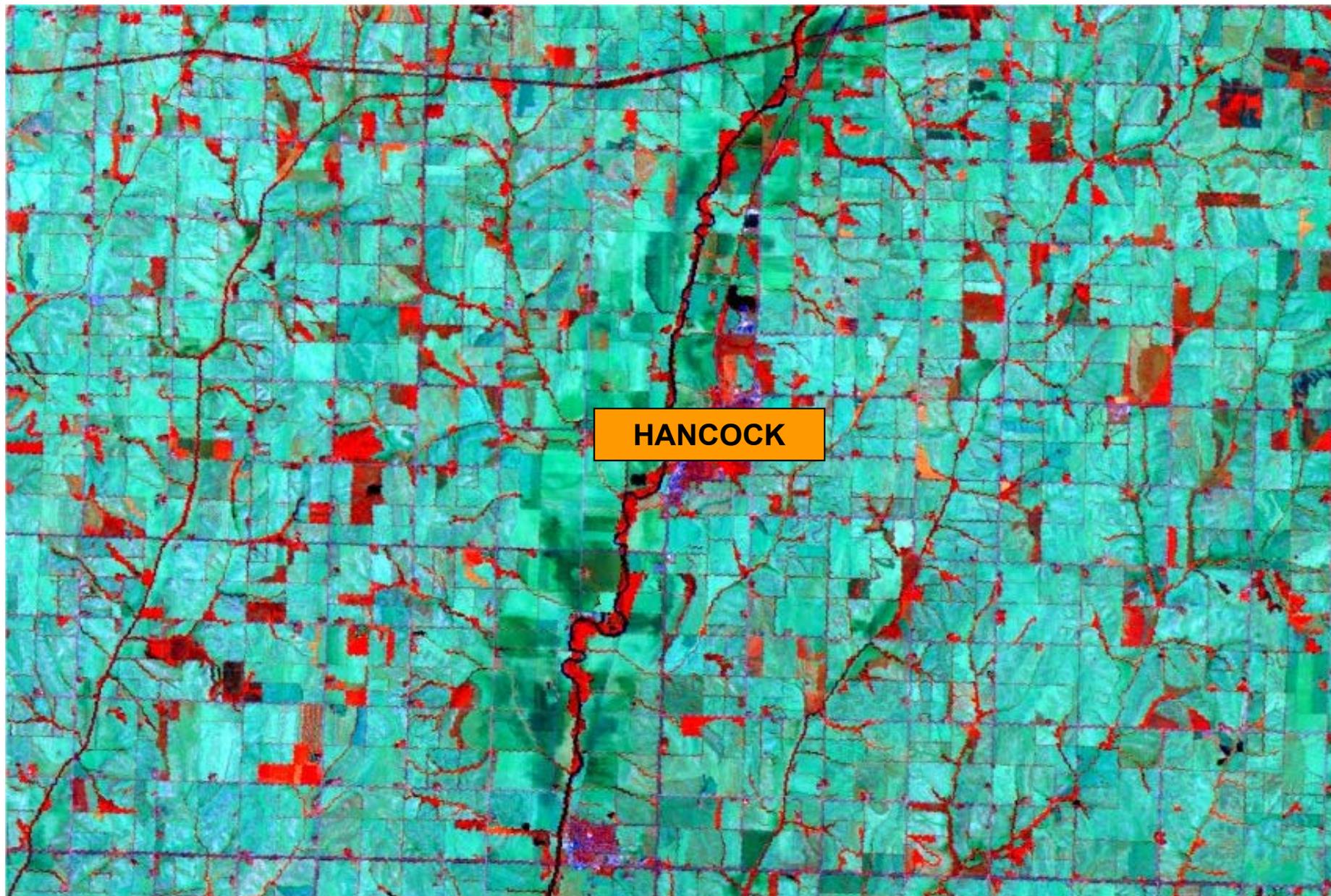
JUNE 8, 2002

APRIL 5, 2002

DEWITT

Landsat - 7 ETM+, CH. 4,5,3 = RGB

POTTAWATTAMIE COUNTY, IOWA: JUNE 6, 2002 (#3 CORN & SOY)



Landsat-7 ETM+, CH. 4, 5, 3 = RGB

US_EAST: 2002 SOYBEAN CROP PROGRESS

PLANTING:

- Essentially completed in all states.

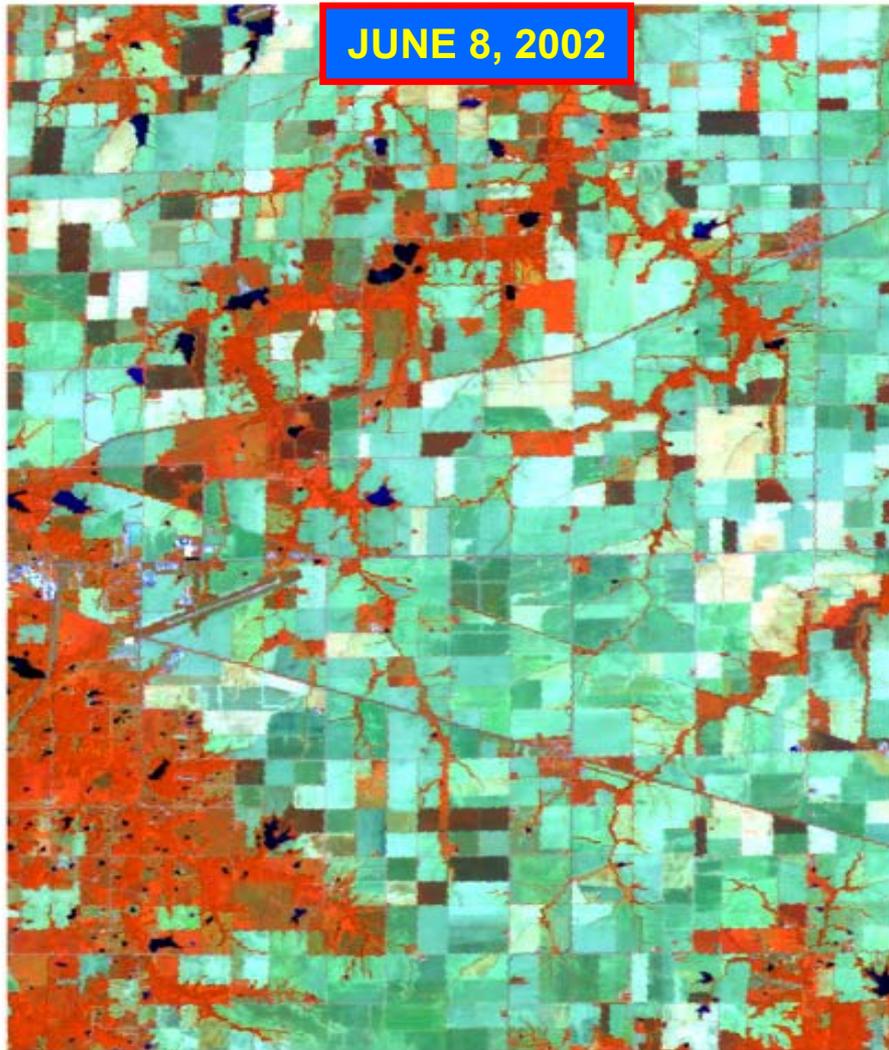
EMERGENCE:

- 90% Emergence in most states, very timely.
- Minor delays in IN (85 / 95 / NA), OH (83 / 93 / 92), and TN (64/ 83 / NA).

CROP CONDITION:

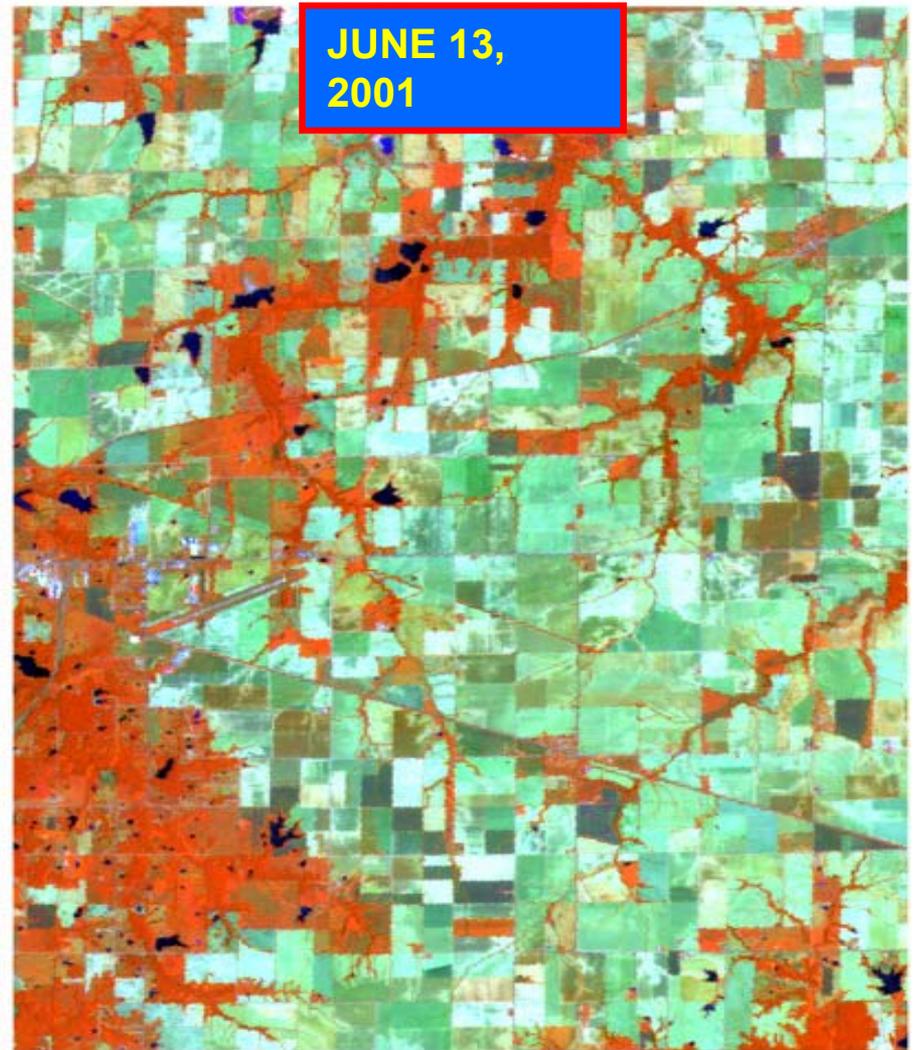
- 20-25% of the crop is in V. Poor – Poor Condition in Louisiana and North Carolina.
- Soybean conditions elsewhere remain very favorable.

AUDRAIN COUNTY, MISSOURI (#1 SOY, #1 SORG)



Landsat-7 ETM+

CH. 4, 5, 3 = R, G, B



Landsat-5 TM

CHARITON COUNTY, MISSOURI (#9SOY)



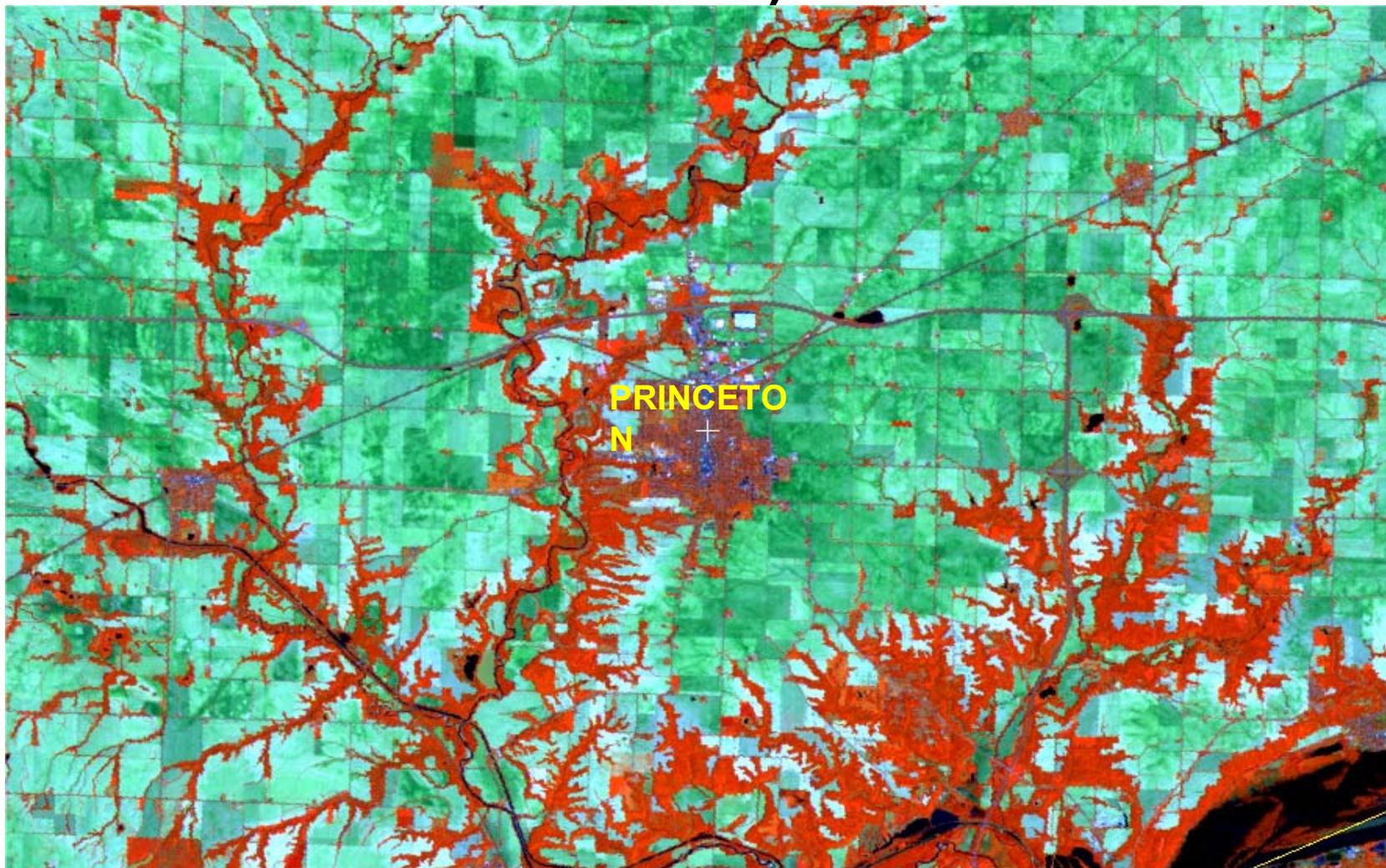
Landsat-7 ETM+

CH. 4, 5, 3 = R, G, B

Landsat-5

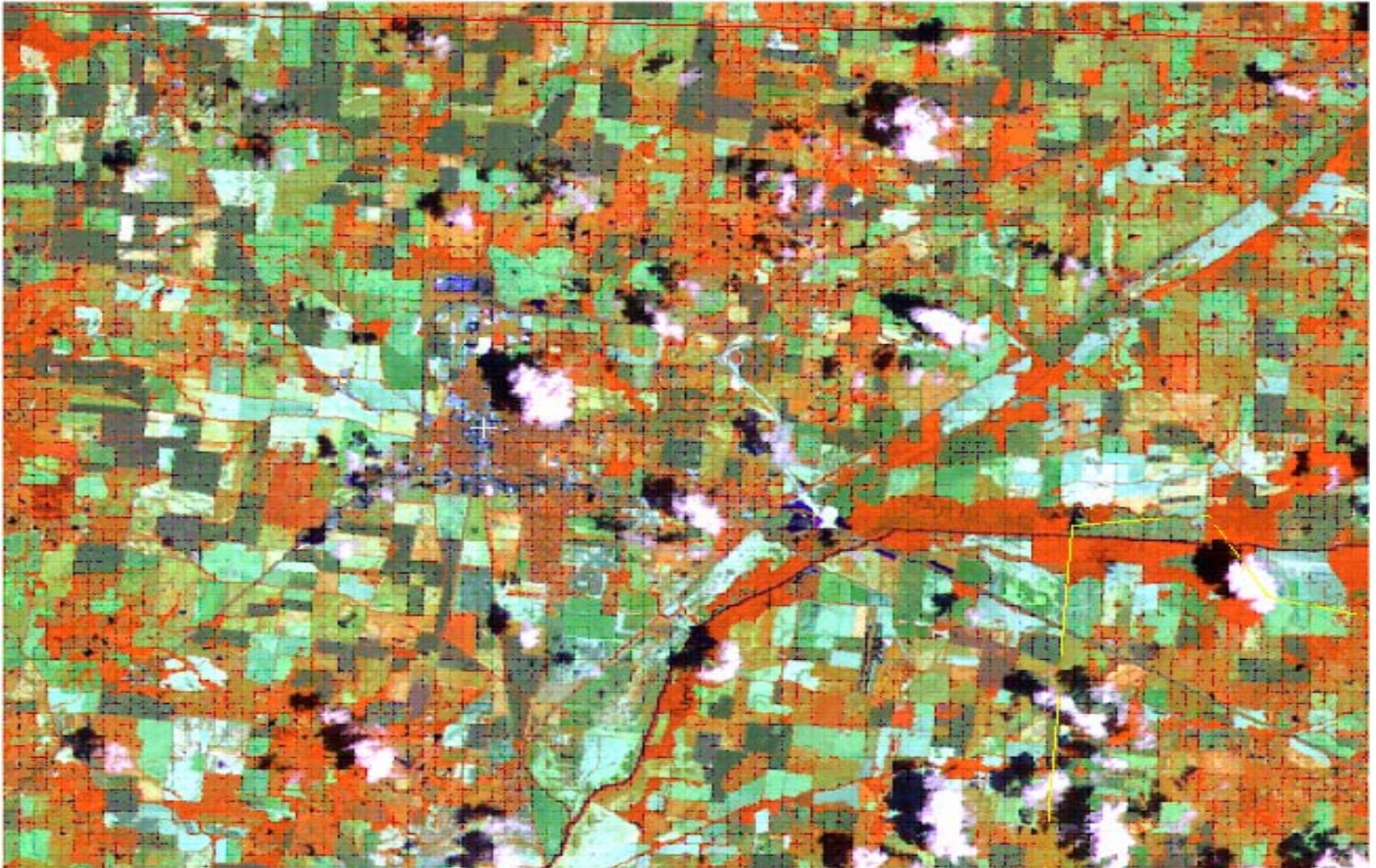
TM

BUREAU COUNTY, IL: JUNE 1, 2002 (#6 CORN, #7 SOY)



Landsat-7 ETM+, CH. 4, 5, 3 = RGB

N.W. TENNESSEE: OBION COUNTY (#1 CORN/SOY)



Landsat-7 ETM+, CH. 4, 5, 3 = RGB

JUNE 3, 2002

US_EAST: 2002 COTTON CROP PROGRESS

SQUARING STAGE:

- Generally timely, with some minor delays in MO, MS and TN.
- Overall range in squaring is 35 – 75%.

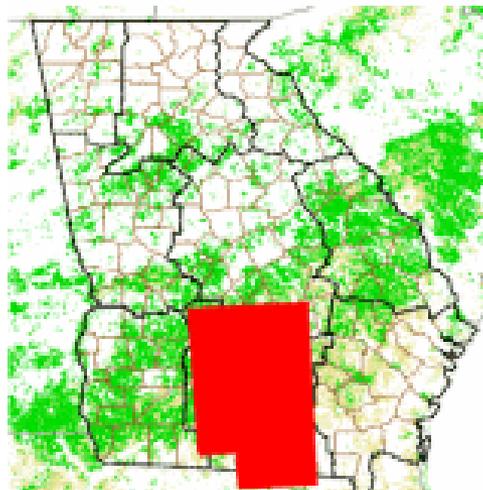
BOLL SETTING:

- Plants have just entered this stage.

CROP CONDITION:

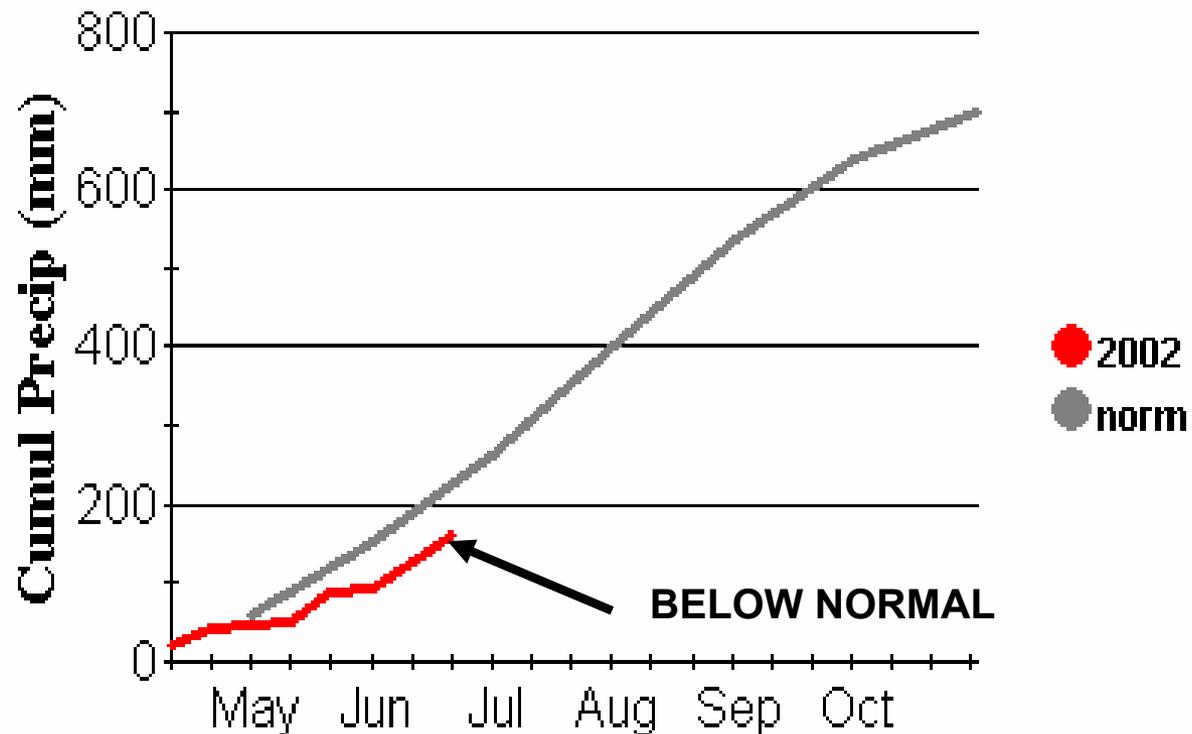
- Generally 10-15% of crop in V. Poor to Poor Condition in most states.
- Conditions in MO and TN are in the 20-25% range, possibly due to earlier wetness.

GEORGIA: MAIN COTTON REGION (CRD 80) APRIL 1 – JUNE 22, 2002 CUM. PRECIPITATION



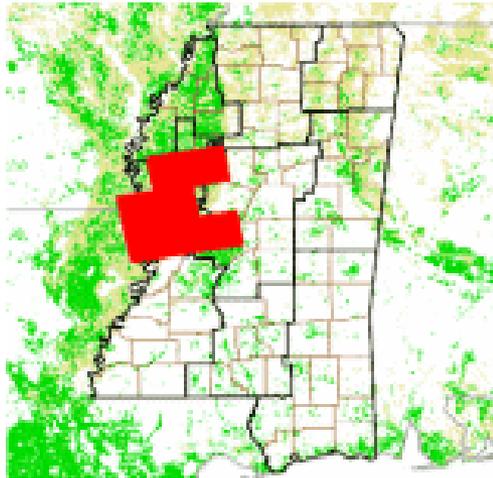
Georgia
CRD: Georgia CRD 80

Georgia CRD 80: Cumulative Precipitation



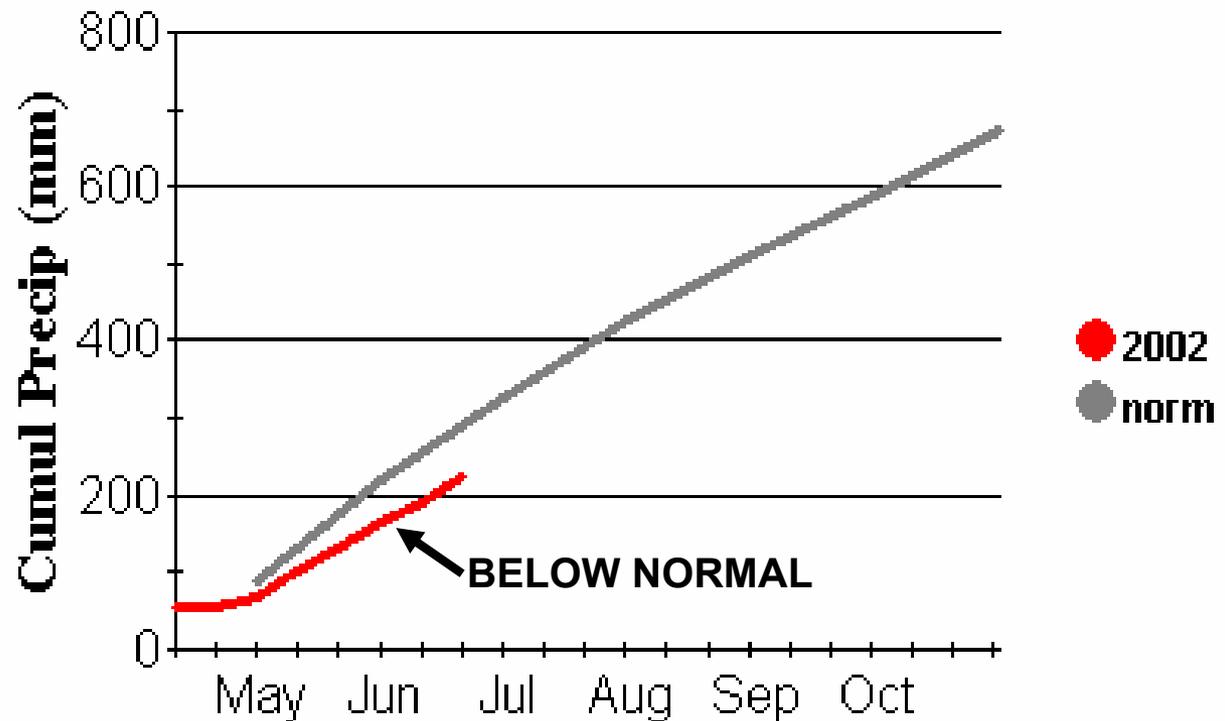
USAF GRIDDED DATA

MISSISSIPPI: MAIN COTTON REGION (CRD 40) APRIL 1 – JUNE 22, 2002 CUM. PRECIPITATION



Mississippi
CRD: Mississippi CRD 40

Mississippi CRD 40: Cumulative Precipitation



USAF GRIDDED DATA

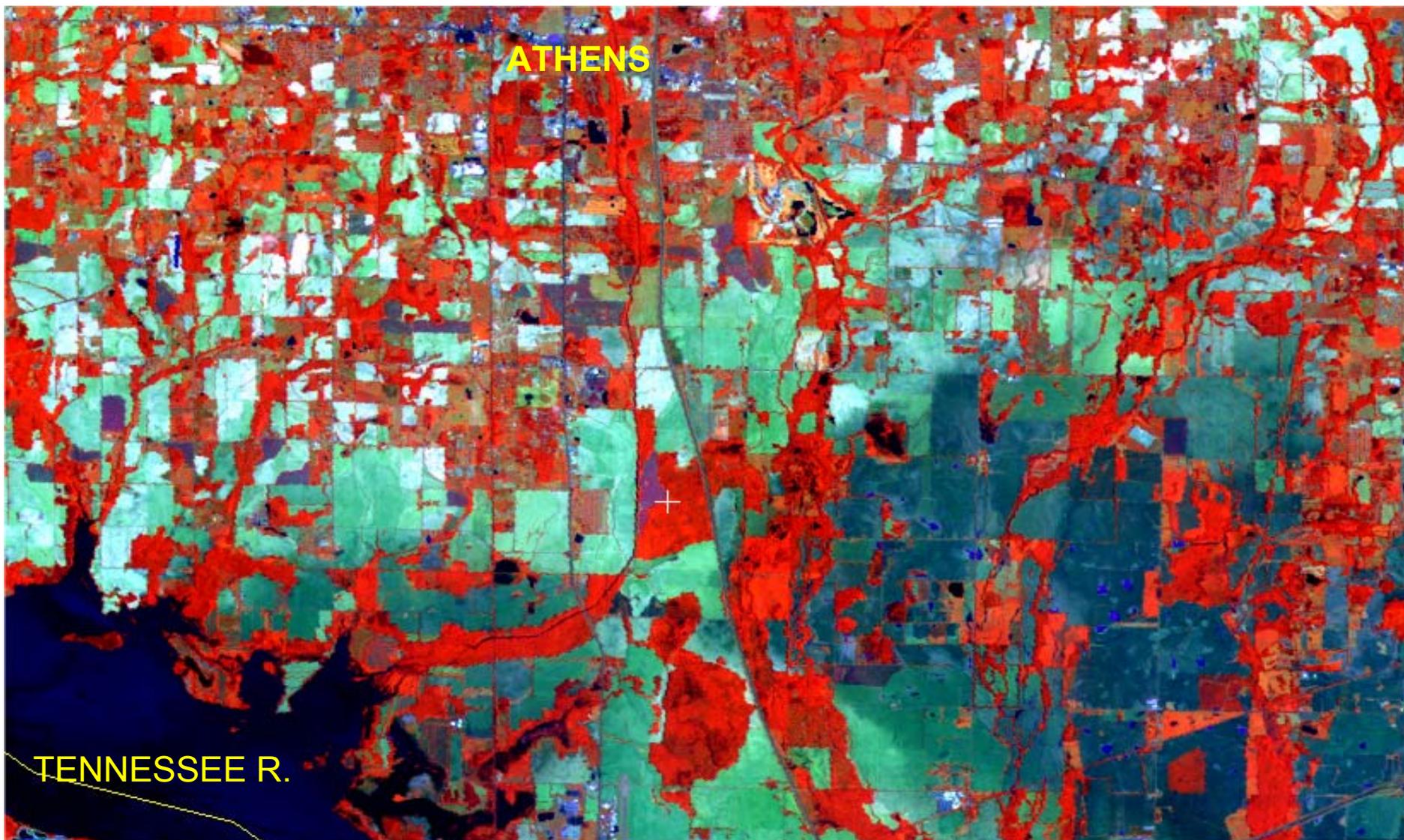
HAYWOOD COUNTY, TENNESSEE: COTTON/SORGHUM



Landsat-7 ETM+, CH. 4, 5, 3 = RGB

JUNE 3, 2002

LIMESTONE COUNTY, ALABAMA: COTTON/WHEAT/SOY/CORN)



Landsat-7 ETM+, CH. 4, 5, 3 = RGB
2002

MAY 27,

US_EAST: 2002 RICE CROP PROGRESS

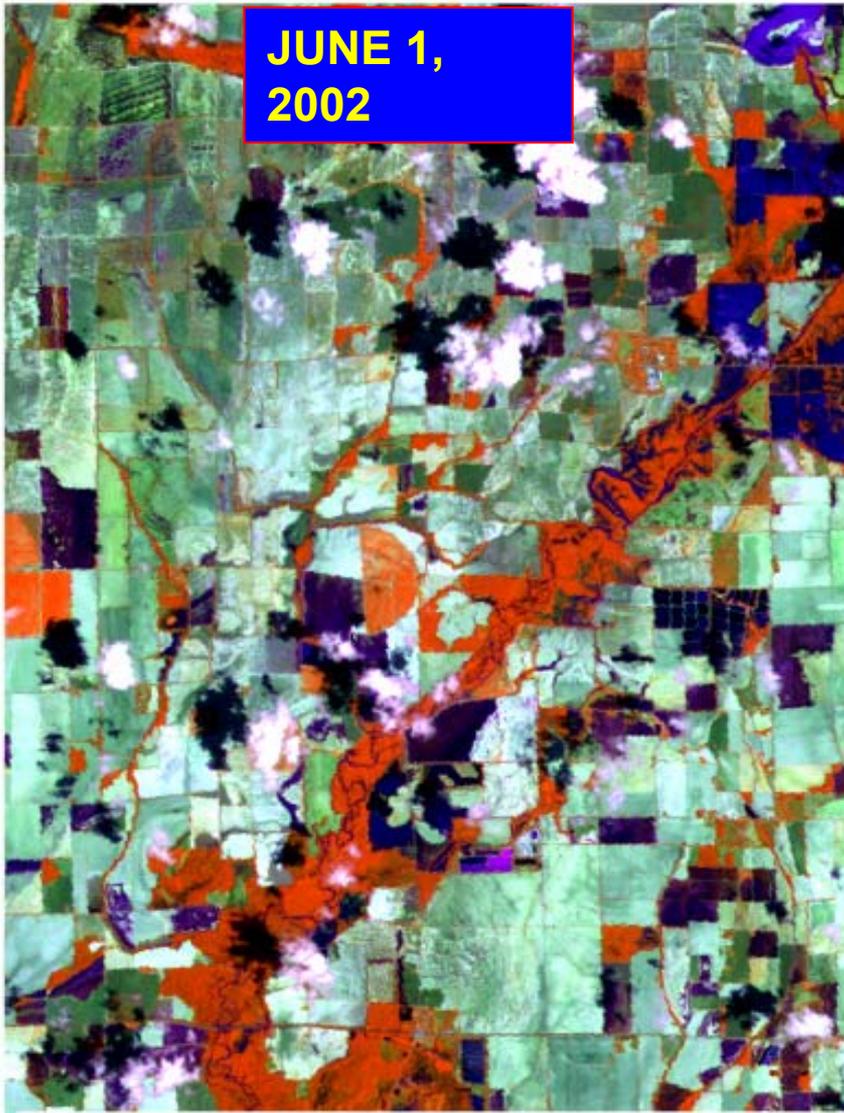
HEADING STAGE:

- The rice crop is on schedule and is progressing well.**
- 35% of the crop has headed in Louisiana.**
- The crop in Missouri, Arkansas and Mississippi has just begun heading.**

CROP CONDITION:

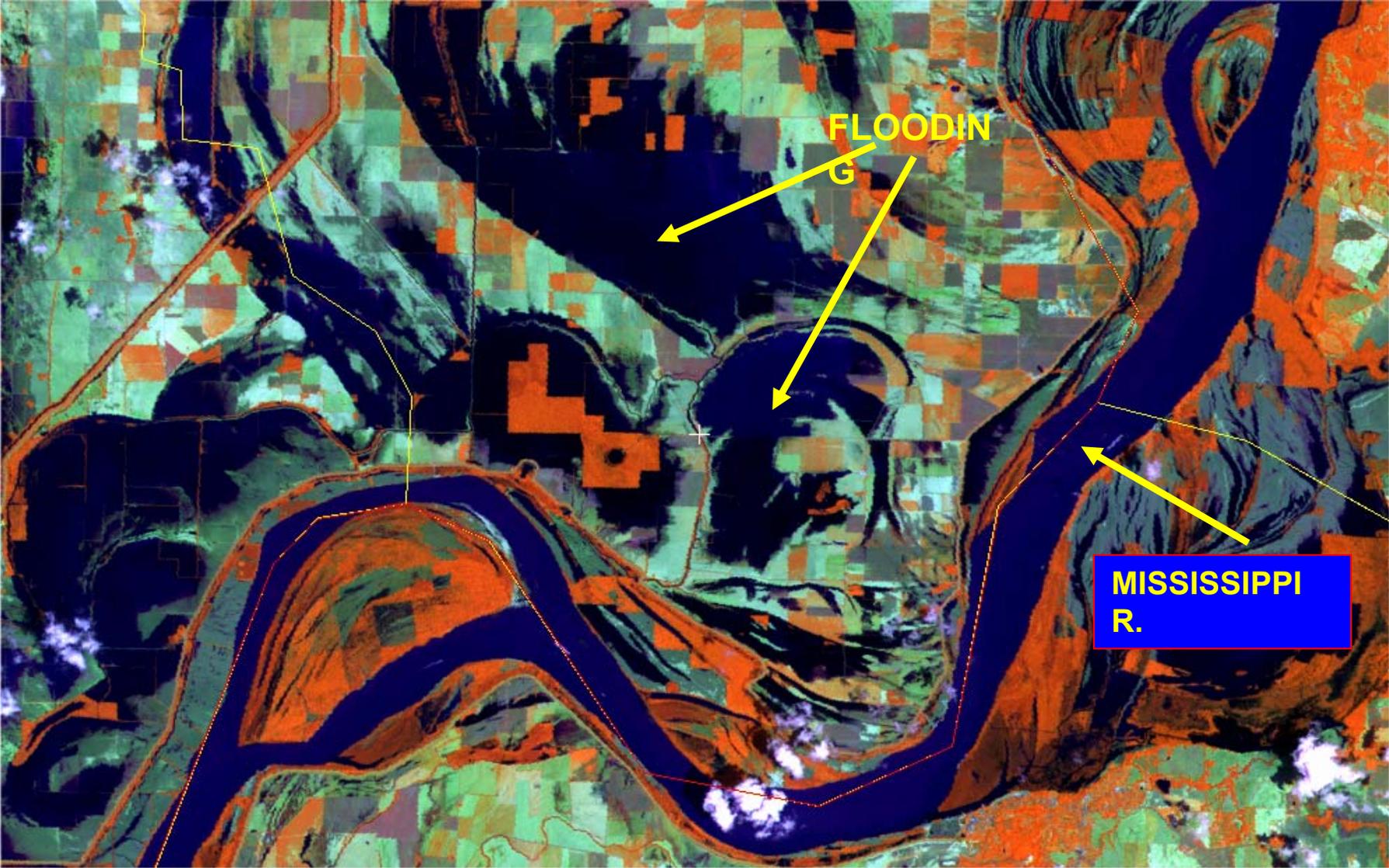
- Overall, about 60-80% of the rice crop is in good to excellent condition.**
- The earlier flooding in the Bootheel region of Missouri does not appear to have damaged the rice crop.**

JACKSON COUNTY, ARKANSAS



Landsat-7 ETM+, CH. 4, 5, 3 = RGB

S.E. MISSOURI FLOODING: MISSISSIPPI COUNTY



Landsat-7 ETM+, CH. 4, 5, 3 = RGB

JUNE 3, 2002

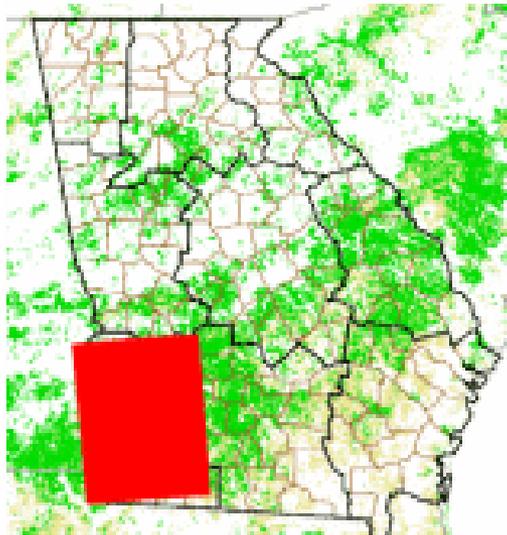
US_EAST: 2002 PEANUT CROP PROGRESS

The peanut crop is currently in the pegging stage. The key peanut states in the eastern half of the U.S. include: Georgia, Alabama, N. Carolina, Virginia, and Florida.

PEGGING STAGE:

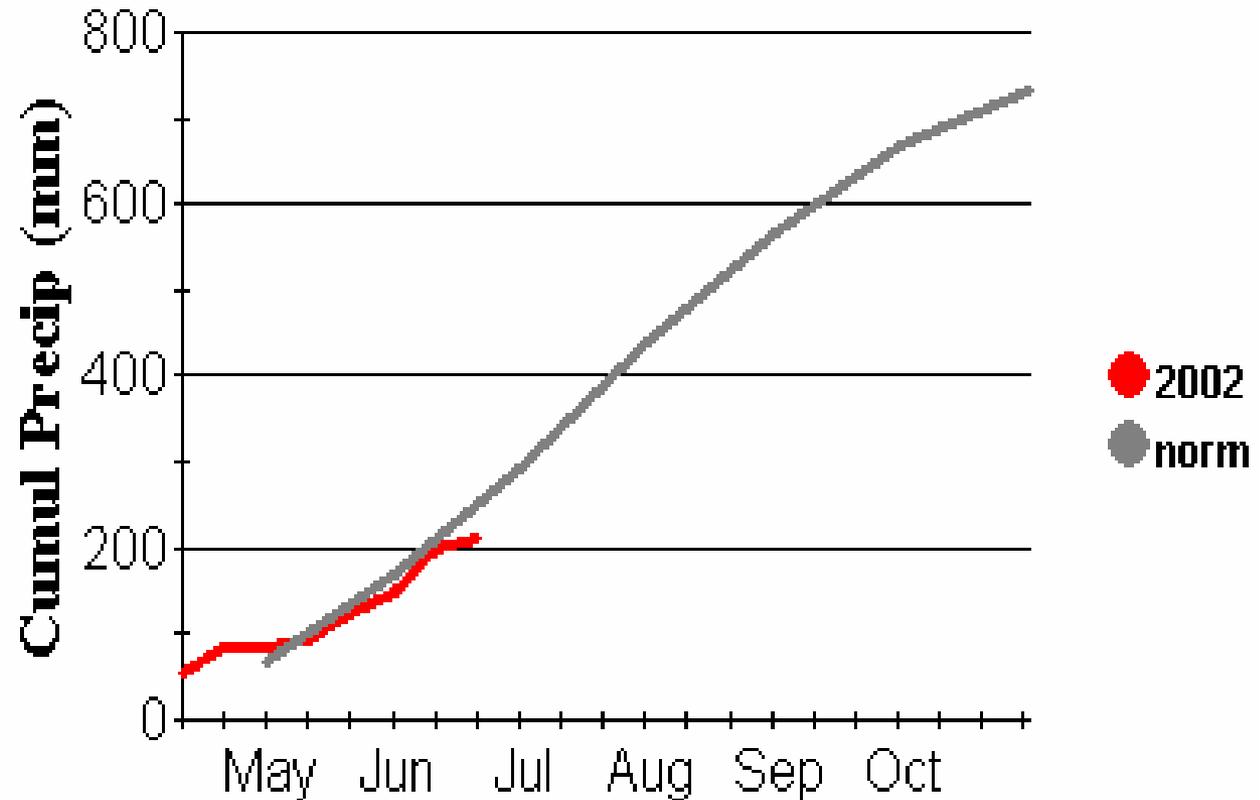
- The crop is progressing in a timely manner.
- Progress by state is as follows: GA (25 / 25 / 26), AL (16 / 17 / 18), NC (5 / 13 / 13), VA (1 / 8 / 6), FL (40 / 59 / 40).

GEORGIA: MAIN PEANUT REGION (CRD 70) APRIL 1 – JUNE 22, 2002 CUM. PRECIPITATION



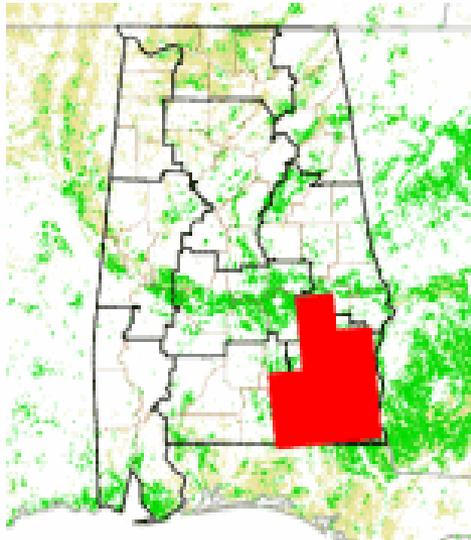
Georgia
CRD: Georgia CRD 70

Georgia CRD 70: Cumulative Precipitation



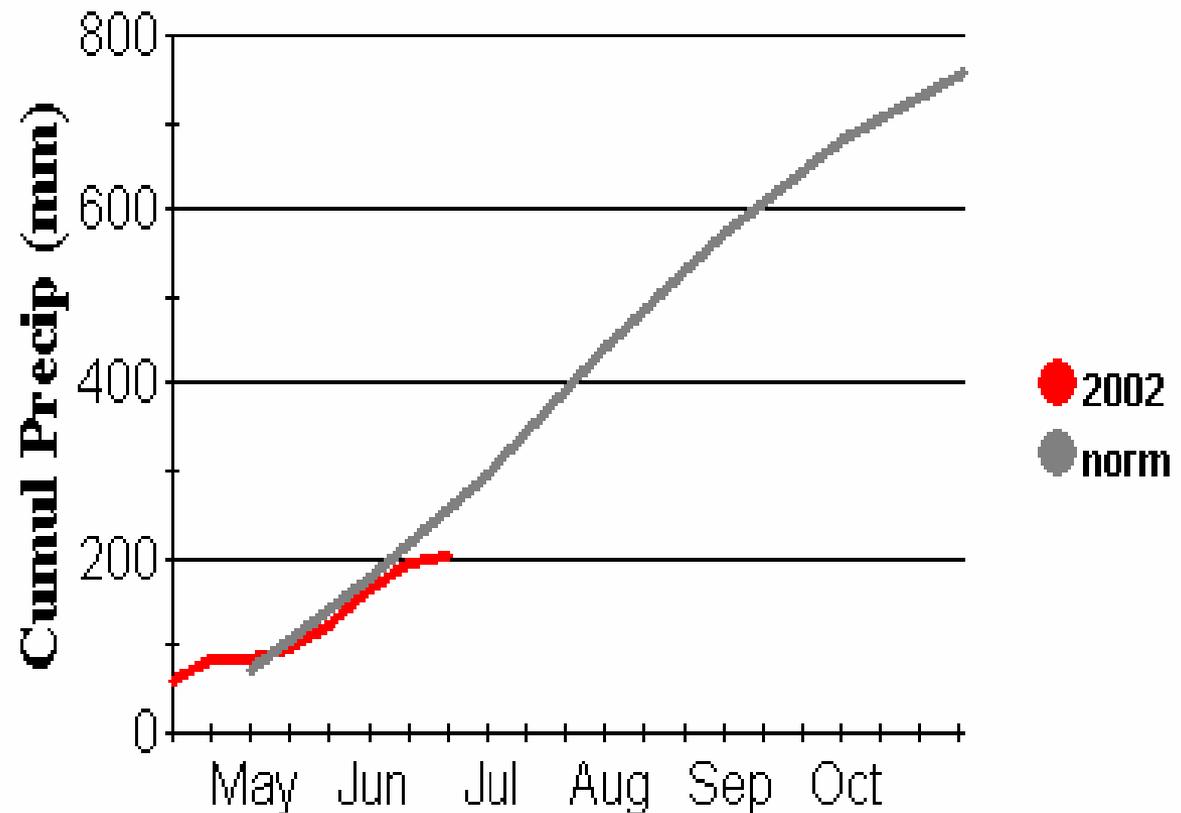
USAF GRIDDED DATA

ALABAMA: MAIN PEANUT REGION (CRD 90) APRIL 1 – JUNE 22, 2002 CUM. PRECIPITATION



Alabama
CRD: Alabama CRD 90

Alabama CRD 90: Cumulative Precipitation



USAF GRIDDED DATA